



GOVERNMENT OF BOMBAY.

GENERAL DEPARTMENT.

ARCHÆOLOGY.

PROGRESS REPORT

OF THE

ARCHÆOLOGICAL SURVEY OF INDIA,
WESTERN CIRCLE,

For the year ending 31st March 1914.



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PART I.

I. Departmental Notes.

Personnel. During the last official year the only items of any importance affecting the *personnel* of the office were my absence on twenty-three days' privilege leave during the month of October when my Assistant, Mr. J. A. Page, acted for me, and my confirmation as Superintendent with effect from the 17th October 1913, under Government of India, Department of Education (Archæology), Notification No. 119 of the 9th April 1914 published in the Government of Bombay General Department Notification No. 2867 of the 15th idem.

Establishment. 2 The changes in the establishment were as follows:—Messrs. N. A. Wartekar and L. R. Date, the Head and Second Draftsman in my office were each on one month's privilege leave, the former in the month of September and the latter in October. The post of the Third Draftsman-Photographer, which had fallen vacant, was filled up, and Mr. S. P. Date, formerly in the office of the Executive Engineer, Bijapur, was appointed to it. Owing to the increase of clerical and menial work in my office I had to request Government to sanction the entertainment of an additional clerk and peon to cope with it. This request was complied with in the Government of India, Department of Education (Archæology), letter No. 356 of the 11th August 1913, embodied in the Government of Bombay, General Department Resolution No. 6384, dated the 1st September 1913. Mr. Y. M. Dikshit was taken on in the new post of clerk sanctioned.

Change of office quarters. 3. The suite of rooms intended for us in the Government Central Offices Buildings, Poona, being ready, I shifted my office there about the close of March. There being no room in our new quarters for the Museum which was in my charge, all the articles, except large and heavy stone sculptures, were, at his suggestion, sent by rail to the Secretary to the Board of Trustees, Prince of Wales Museum of Western India, Bombay, who, I hear, has temporarily housed them in the godowns of the Bombay Asiatic Society. The stone sculptures and the coins only are now with me in the new office. The former will be despatched to Bombay as soon as the Museum building is ready to receive them, and the latter will be handed over to the Assistant Curator, as soon as he is appointed, whom the Board of Trustees intend giving me for arranging the archaeological section.

II. The Year's Work.

4. During the monsoon recess we were as fully occupied as ever with the usual office work, which is becoming heavier every year. The very first thing that I have to take in hand after the termination of the touring season is the preparation of the Annual Progress Report, which is not mere clerical work but requires close study and collocation, at least in the descriptive part of it. An account of the conservation, research and epigraphic work done during the year had also to be prepared and sent to the Director-General of Archaeology. The Office Photographer was engaged upon developing the many negatives taken in the field and preparing no less than six sets of prints from each of them. A good many prints had also to be taken for the Photoinco Office in connection with the second monograph of Mr. Cousens, the late Superintendent of this Circle. This whole amount of work being too heavy for one single individual, the Photographer was helped by the Second Draftsman. The latter was also, in conjunction with the General Assistant, occupied with the work of sorting and arranging the impressions of inscriptions we took in the field. In regard to the drawing work, eight record drawings were finished, which all stand this time to the credit of the Head Draftsman. He and the Second Draftsman had also from time to time to make copies, for office references, of the tracings accompanying the estimates of conservation works.

5. Mr. Page, having arrived but shortly before the commencement of the year under review, was occupied with making himself familiar with the office routine and checking and approving estimates for conservation work which are coming in larger numbers year by year. He was likewise engaged in writing and printing conservation notes on the ancient monuments he visited in April and also during the rainy season. He was also of great help to me in the preparation of the Annual Report.

6. Mr. Page, being appointed to look after the conservation work of this Circle, I was able this time to devote the greater portion of my touring season to both the research and exploration branches of archaeology. Nearly a month and a quarter I spent in touring in the Bilisa District of the Gwalior State, visiting ancient monuments, writing descriptive notes, and photographing and making drawings of archaeological buildings. The next three months I was encamped at Besnagar, the ancient Vidisa, where I was engaged in conducting excavations. Museum work, too, had claims on my attention, and these were duly fulfilled. A detailed statement of my movements will be found in Appendix A. Though Mr. Page came to India at a time when the hot season was almost in full swing, he was full of willingness and enthusiasm to go and inspect some monuments, and consequently I allowed him to visit Elephanta, Bassein and Ambarnath in April. In order that he might make himself acquainted with the various styles of architecture, I also sent him out in the monsoon. In the touring season proper he visited all the places which were, or are still, centres of active conservation work, and also almost all the monuments of the Dharwar and Bijapur Districts which had been declared protected, as detailed in the tour programme of last year's report. The diary of his movements may be seen in Appendix A.

7. Appendix C sets forth a list of the photographs taken during 1913-14. My two draftsmen were with me on tour, and have material for the preparation of new drawings, which they will finish in the course of the ensuing monsoon recess.

III. Publications.

8. Beyond the Annual Progress Report for the year 1912-13 no official publication was brought out by this department.

IV & V. Office Library and Annual Expenditure.

9. A list of the new books added to the office library is given in Appendix F. I am exceedingly obliged to the Government of Bombay for having

presented my office library with copies of all the volumes of the Bombay Sanskrit Series that were available. This has supplied a long-felt want.

10. A statement of the expenditure of the Survey will be found in Appendix E.

VI. Museums.

11. The Secretary to the Board of Trustees of the Prince of Wales Museum of Western India, Bombay, has kindly sent me the following note regarding the progress that is being made towards the completion of this building:—

“Steady progress has been made with this building during the past year. The roofing is complete throughout, while the erecting of the central dome is well advanced.

“The plaster work and general finishing of the interior are now in progress.”

12. Except one plaster cast nothing of special interest was added to the Archæological Museum which had been attached to my office. Dr. Horovitz of Aligarh, when some time ago he was studying the Hymyaric exhibits of the Berlin Museum, came across an altar, the top of which was missing. From the photographs of the Hinterland antiquities which were presented to the Poona Museum by the Director-General of Archæology and to which reference has been made in last Progress Report (p. 3), Dr. Horovitz was at once able to see that the missing part was in this last museum. At the suggestion of Dr. Marshall plaster casts were exchanged so that each museum has now completed its fragment. The cast of the fragment in our museum was made for this Department by Mr. Burns, Principal of the School of Art, Bombay, and the cost of making it and despatching it to Berlin was borne by the Director-General of Archæology.

13. I have already mentioned that by far the greater portion of the archæological collection attached to my office was, about the close of March last, sent to the Secretary to the Board of Trustees, Prince of Wales Museum, when my office was shifted to the Central Offices Building, there being no room there for exhibiting it.

14. The only object of importance added to the Bijapur Museum was the old prayer carpet of the Jami Masjid. A new one, exactly imitating it, was prepared in the Bijapur Jail and presented in its stead to the mosque authorities. The expenses of the latter were borne out of a grant kindly made by the Director-General of Archæology, and the idea of effecting such an exchange was suggested and made practical by R. C. Brown, Esquire, I.C.S., when he was Collector of Bijapur.

15. It is a matter of immense regret that so many moveable antiquities of the Adil Shahi period are fast leaving Bijapur. Tourists of all sorts and conditions flock to this place in the cold season, some of whom will pay anything to secure them as mementos of their visits. The result is that very few objects can be secured for the local museum, and these with very great difficulty. The growth of the Bijapur Museum has thus been stunted. In August 1913 when a meeting of the Museum Committee was called, I had suggested for their consideration that all effectual stop should be put to this traffic in Bijapur antiquities by taking action under section 17 or 18 (preferably the former) of the Ancient Monuments Preservation Act. My suggestion appears to have commended itself to the Committee, and the President, who is Collector of Bijapur, has, I hear, approached Government on the subject.

16. A list of the antiquities acquired or presented to the various museums will be found in Appendix G.

VII—VIII. The Listing of Monuments and Original Research.

17. I am glad I was able to turn my attention this year to these branches of archæology. The work of Listing and Original Research was

carried out this time in the Bhilsa District of the Gwalior State. Thanks to the genuine and deep interest personally evinced by H. H. the Maharaja Scindia, an Archæological Department has been created in his State, and the work of preparing an inventory of the ancient monuments obtaining in his territory, and of excavating old sites of importance, has now been systematically taken in hand. With a view to carrying out these objects, especially the first, the Maharaja has been pleased to appoint, as Inspector of Archæology, Mr. M. B. Garde, one of the scholars trained by Dr. Marshall, Director-General of Archæology. The first month and a half of the last cold season was spent by me in his company on a tour in the Bhilsa District, and here I had an opportunity of showing him how the inventory was to be made. In this district I visited a good many monuments that were either entirely unknown or but partially or imperfectly known before. Full descriptive notes were taken down, most of which have been reproduced in Part II. Some have been reserved for being embodied into articles to be published in the Archæological Annual of the Director-General of Archæology. They are concerning the Udayagiri Caves and the objects of antiquity stored in the Besnagar Museum. The first will throw some light on the style of architecture prevalent during the early Gupta period, and the second on that of the Sunga, about which very little is known. As many photographs were taken and necessary drawings prepared to give an accurate idea of the various architectural features of the monuments inspected, a good beginning has thus been made for the Lists of Central India, and within three years the inventory of the Gwalior monuments is expected to be complete.

IX. Excavation.

18. After finishing off my tour in the Bhilsa District I came to Besnagar, the ancient Vidisa, two miles from Bhilsa, and was encamped there to undertake excavations, the results of which are briefly described in Part II of this report, a full account being reserved for the Archæological Annual where it will be accompanied by illustrations. This is the first excavation systematically conducted on a large scale in this Circle. Though Besnagar is a mass of ruins spread over a length of at least two miles, it was a matter of no small difficulty to select a site which for the money spent upon its excavation would yield antiquities not only in fairly large quantities but of a period anterior to the Christian era, about which we are still comparatively in the dark. But this difficulty was practically removed when the discovery of an inscription on a column locally known as Kham Baba was made. The credit of bringing this record first to the notice of the antiquarians is due to Dr. Marshall who visited Besnagar in 1909 and published an account of it in the *Jour. R. As. Societe* for the same year, p. 1053 and ff. From the inscription it was clear that the column was a *Gāruda-akṣaja* (i.e., a pillar surmounted with a figure of Gāruda) erected in honour of Vasudeva by a Hinduised Greek called Heliodorus, who came there as ambassador from the Greek Antialkidas of Taxila (near the present Sarai-Kala of the Punjab) to the court of Bhāgabhadra, ruler of Central India. Here then was indicated the definite site of a monument, viz., a temple of Vasudeva, and, for all practical purposes, a definite date, viz., 140 B. C., which, from numismatic evidence, has been assigned to Antialkidas. It was thus quite natural for an excavation expert like Dr. Marshall to infer that not far from it could be exhumed the remains of this Vasudeva temple. He was for long longing to have this site explored when Maharaja Scindia instituted an Archæological Department and asked for Dr. Marshall's help. Thanks to the Maharaja and the munificent sum of Rs. 4,000 which he placed at our disposal and which was afterwards so kindly supplemented by Rs. 1,000 from Dr. Marshall, the site round Kham Baba was taken up by me, at the latter Officer's instructions, for excavation, which from about the middle of December to about the middle of March lasted for three months of the last cold season. The excavation is by no means yet complete, and at least one more cold season is necessary to finish it. I was particularly fortunate in that during the greater portion of the period I was encamped at Besnagar, Dr. Marshall was in camp at Sanchi, which is only five miles from it. It was thus possible for him to come to Besnagar and give

me advice from time to time, which, coming as it did from such an exploration expert as he, was invaluable and was more than confirmed by the results achieved.

X. Epigraphy.

19. No less than eighty-seven inscriptions were copied this season. A few of these only are new, and the rest either published or more or less known. Even the fresh impressions of these last are not without their interest, as they in many cases enable us to correct the old tentative readings. A list of these inscriptions is given in Appendix D, and an account of some of them is also contained in Part II.

XI. Numismatics.

20. The most important find I have to note under this head is the hoard of 2,393 Kshatrapa coins discovered at Sarwaria in the Banswara State, Rajputana. They commence with the reign of Rudrasimha I, son of Rudradaman I, and end with that of Rudrasena III, son of Rudraman II, and range from the year 103 to 275, i. e., from A. D. 181 to 353. The coins were first sent to the Superintendent, Rajputana Museum, Ajmer, whose account of them will be found on p. 3 and ff of his Report for 1912-13. Through the kindness of the Kamdar, Banswara State, I have been able to secure the whole hoard for my inspection, and my results will be made known as soon as I have examined all the coins.

21. The report of the Honorary Secretary to the Bombay Branch of the Royal Asiatic Society regarding the examination and distribution of coins acquired by Government under the Treasure Trove Act (Act No. VI of 1878) will be found in Appendix H. The same Appendix contains an account of the numismatic finds of the various districts coming under this Act. This has been deduced by piecing together the notifications that have appeared from time to time in the *Government Gazette*, no information on this score being supplied by the Collectors though they are required to do so in accordance with Government Resolution No. 3407, General Department, dated the 15th July 1904.

XII. Protected Monuments.

22. The list of monuments, declared protected during the year under report and appearing in Appendix K, though perhaps not as lengthy as that of the previous year, still affords considerable ground for satisfaction. It is a matter of great delight to note the dwindling balance from the list of monuments initially recommended for protection by Mr. Cousens in the Progress Report for 1907-08, and it will not be too much to expect that next year even this balance will be cleared off. Mr. Cousens's list, however, it must be borne in mind, is by no means exhaustive, and it is time that the *Revised Lists of Antiquarian Remains in the Bombay Presidency*, 1897, should now be taken by the District Officers as their guide and those monuments selected for notification in the *Government Gazette* and declared protected under the Ancient Monuments Preservation Act, which have not already been done so, but which are classified therein as either I or II, those of class III alone being for the present held over. If any doubt arises with regard to the classification of the first two classes of monuments entered in the *Revised Lists* or as to the desirability of including among protected monuments any not noted therein, it should be made the subject of reference to this Department, and the question will be settled as early as possible.

23. In regard to the execution of agreements with the owners of monuments it is particularly gratifying to be able to record the considerable activity displayed by the Collectors of Districts in this direction, which cannot but be deservedly appreciated when one considers the manifold duties incumbent upon their office. In the case of no less than forty-three monuments agreements have been so signed, as against only one of the previous year. It is, indeed, a task essentially onerous to allay inherent suspicion and successfully prevail upon an owner, who through ignorance cannot appreciate the merit of his possession and is apathetic of its artistic amenity, to consent to the execution of its repairs

under the direction of Government. Unremitting effort to this end is, however, essential, as it is only by this means that an archaeological monument, privately owned, can be maintained in a manner it architecturally deserves, and effectually rescued from the source of its most frequent disfigurement.

24. In connection with the application of section 3 of the Ancient Monuments Preservation Act, 1904 (VII of 1904), the question was recently raised as to whether ancient monuments which were the property of Government should be declared protected under that section. It was urged on behalf of the proposal that a larger measure of protection was afforded to monuments under section 16 of this Act than under the provisions of the Indian Penal Code (*e.g.*, Sections 425 and 426). The question being referred to the Bombay Government for their views by the Government of India, the former recommended that those monuments, being the property of Government, which, in view of their archaeological value and their existing state of preservation, were worth preserving, should be declared protected under this Act—a view in which the Government of India concurred as per their letter No. 84 of the 7th March last.

25. This is exceedingly satisfactory. For in some quarters it seems to have been assumed that monuments believed to belong to Government need not be notified as protected monuments under the Act. But an instance has actually occurred, in which a monument previously assumed to belong to Government, and in respect of which no notification was issued, has been successfully claimed by a private individual and his ownership acknowledged by Government. On the whole, it is extremely desirable to affix a notification to the monument, for it will have the effect of calling upon the persons concerned to assert their title to it if they have any, or express any objection to the notification, and the absence of any such assertion for a reasonable period may safely be taken as its having been established as Government property.

26. I am sorry I have to report the following case, which occurred during the year under review in the Satara District. In May 1908 one Pir Sayad Haji Mahomed Kasamsha Chisti of Bombay went to the tomb of Afzulkhan on Pratabgad, which has been declared protected under the Ancient Monuments Preservation Act (Act VII of 1904). He was accompanied by some Muhammadan residents of Mahabaleshwar, and, in their presence, closed his eyes, and, after a short interval, declared that he had had a vision in which he had seen Afzulkhan sitting on a throne surrounded by other persons in white raiment. In the course of the vision Afzulkhan ordered Pir Chisti to enlarge the tomb. Pir Chisti complied with these orders, and enlarged it in such a manner as to leave the original tomb quite invisible. He was convicted of an offence under section 16 of the Act on 2nd June 1913 by the Sub-divisional Magistrate and sentenced to pay a fine of Rs. 1,000, in default of which to undergo simple imprisonment for two months. On appeal to the Sessions Court the fine was reduced to Rs. 150.

XIII. Conservation.

(a) Bombay Presidency.

27. A statement of conservation work carried out in this Presidency during the year 1913-14, is shown in Appendix L, and, of those it is proposed to take in hand during 1914-15, in Appendix S. I am exceedingly obliged to Government in the Public Works Department for having increased from Rs. 20,000 to Rs. 30,000 the annual grant for the conservation of archaeological buildings and remains. This was absolutely necessary, because, as the number of monuments conserved or restored increases, the money required for their annual maintenance must necessarily increase. Besides, the number of the monuments declared protected by Government is increasing year by year and with it also the responsibility of taking speedily in hand for repairs as many of them as possible.

28. In fact, during the last three years there has been such a sudden increase in the number of monuments declared protected that it has necessitated the laying-down and pursuit of a systematic conservation policy, which would

lead to a thorough inspection of them all within a reasonable period of time with a view to determine what remedial measures are necessary in the case of each and the execution of repairs to them in the order of their relative urgency. With this end in view I sent Mr. Page, as intimated in para. 56 of the last Progress Report, to undertake tours of inspection in two districts, *viz.*, Bijapur and Dharwar, which teemed with such monuments, and he was during the earlier part of his touring season occupied with this work. All the monuments of these districts that have been declared protected have thus been scrutinised, and for every one of these the necessary conservation measures noted down. They have all been embodied in the conservation notes framed by him. Next year he will take two or more such districts for inspection.

29. Over and above the current repairs which are of an obvious and simple character and which have to be executed every year to a great many monuments, special repairs were initiated and are in progress in the case of the temple of Ambarnath in the Thana district, temple of Gondeshvar at Sinnar in the Nasik District, the Asar Mahall at Bijapur and the old Chalukyan temples at Aihole and Pattadakal in the Bijapur District, and the Jami Masjid at Tatta in Sind. What repairs were executed in the case of each during the year under report is clear from the last but one column of Appendix L. Most of these places were visited by Mr. Page. Other places in addition to these, such as Ghatghar, Pitalkhora, Ahmedabad, Sarkhej, Dholka, Champanir, and so forth, were also inspected by him. Printed copies of his recommendations for the care and protection of all the ancient monuments visited by him have already been submitted to Government, both in the General and the Public Works Department, and also communicated to the officers concerned. References to some of these places will be found in his report contained in Part III.

30. It appears from his report (pp. 77-8 *infra*) that pointing and whitewashing still continue to disfigure the archaeological buildings at Bijapur, Champanir and Ahmedabad. This is deplorable as all these places abound with old monuments which are gems of their kind. Every endeavour ought, therefore, to be made to improve their appearance. Other sources of disfigurement are the putting up of trellis work in the front portions of the mosques and the erection of *kachcha* built and limewhited latrines and other such abominable structures often against the walls of the monuments. These last are noticeable almost exclusively at Ahmedabad. These and whitewashing are not likely to disappear unless agreements with the owners of monuments are executed, and this Department is hopefully waiting for the day when the Collector of Ahmedabad will be in a position to take the needful action in this respect. Steps can, however, be easily taken to scrape out pointing and thus remove at least one eye-sore. For this item the P. W. D. subordinates appear to be responsible, and it is high time for the Executive Engineers concerned to see that pointing is carefully scraped off where it is altogether unnecessary and is recessed at least $\frac{1}{4}$ " from the masonry face where the joints have gaped sufficiently to require it. Government have already spent so much for rendering the monuments of these places structurally sound, and it would be a thousand pities not to expend a trifle more to make them look neat and artistic.

31. This year no less than eight inspection reports were received as against one of last year. They were sent in by the Executive Engineers of Nasik, Ahmednagar, Sholapur, Eastern and Western Khandesh, Thana, and Surat and Broach Districts. From Sind only one report was received, *viz.*, from the Executive Engineer, Eastern Sindh, through the Superintending Engineer, Indus Left Bank Division. They will be found in Appendix P. They throw far more light on the nature of the conservation work executed than even the last but one column of Appendix L does, and contain some suggestions from the Executive Engineers for further safeguarding the monuments. These suggestions are valuable and highly welcome, and every effort is being made to give effect to them. In particular this Department has the satisfaction to note that the old monuments are being systematically looked after, so far, at any rate, as the districts just referred to are concerned, it being impossible for the Archaeological Officers owing to the enormous extent of their Circle to visit them all regularly.

32. It is not at all unlikely that the Executive Engineers, who have not favoured this office with their reports, were too busy to visit the archaeological buildings in their districts. But if the Collectors themselves, than whom it is not possible to find more hard-worked District Officers, have found time to turn their attention to the archaeological matters, connected with the Ancient Monuments Preservation Act, which, being of a legal character, not unfrequently are intricate and taxing, it would not be too much to expect the Executive Engineers in general to devote some of their time to the inspection of the archaeological monuments in their charge. Of the districts from which no reports were received, Ahmedabad, Bijapur and Dharwar, in particular, abound with monuments, and consequently this Department cannot but be anxious to know how the ancient structures there are faring. What is really required by the Government Resolution, Public Works Department, No. A—2475, dated 23rd October 1903, is the result of the inspection of the monuments conducted by the Executive Engineers themselves, and not by their Sub-divisional Officers as seems to have been done in the case of one or two of the inspection reports submitted this year to this Department.

33. I have to report with regret the defacement and breakage of certain images caused on the 14th of February last in the temple of Gondeshwar at Sinnar in the Nasik District which has been declared a protected monument. In spite of the searching inquiries conducted by the District authorities the desecrator or desecrators have not yet been brought to account. Fortunately the damaged figures are in no way remarkable for their excellence as sculpture and exhibit generally the disintegrated surface of long exposure to weather. This Department has recommended repairs to be undertaken in those instances only where the broken fragments of the old stone are available, Meyer's stone cement being advised to be used in resetting.

34. In February 1913, I forwarded, through the proper channel, to all the officers in charge of ancient monuments in my Circle, copies of an extract from the "Burma Magnet" of 30th November 1912, to which my attention was drawn by the Director-General of Archaeology and which recommended the use of the mixture of nitric and sulphuric acids for the purpose of destroying tree stumps. I received replies, embodying the results of their trials, from the various Executive Engineers of the Bombay Presidency in the course of the year under review. Outside this Presidency, however, the Dewan of the Indore State was the only officer that favoured this office with a report. All these reports will be found in Appendix B. Except in one solitary instance the use of this acids mixture does not seem to have proved efficacious.

35. One of the problems that is at present engaging the attention of this Department is how best to conserve a monument, —a temple or a mosque—whose walls have started bulging out or have so bulged out as to be in danger of tumbling down. The cause of this dilapidation is plain enough. The walls are doubtless very attractive in appearance consisting as they do of beautifully carved faces, both inner and outer. But these faces are of a thin section, and in-between the space is filled with heaped rubble, unbonded and devoid of any vestige of cementing material. Such being the construction of the walls, when in the course of time rain water percolates through the joints of the upper masonry, a movement is started in the loose infilled core, resulting in the varyingly disastrous stages of disrepair in which we at present see so many archaeological buildings. With such a state of affairs reparatory measures applicable reduce themselves to either wholly dismantling and rebuilding them—a usually prohibitively expensive item, or the adoption of some expedient measure for arresting further dilapidation. This last alternative has become possible on account of an apparatus called a cement grouting machine which was designed by Sir Francis Fox for the injection of liquid portland cement into the hollows and crevices of loosely built and disintegrating walls of old buildings so as to render them one whole compact homogeneous mass. The machine is in general use for such purposes both among archaeological monuments and in general

building work in England, and, to mention two instances of its notably successful application, it has been the means of saving Winchester Cathedral, and St. Paul's Cathedral, London. It was for the especial treatment necessary to the former fabric that, I understand, the apparatus came to be designed. An application to Government was made for the purchase of one such machine through Sir Francis Fox for use in the Western Circle, and I am highly indebted to Government, in the Public Works Department, for very generously and promptly arranging to order it—As soon as it arrives here in India, the Assistant Superintendent, who first brought it to the notice of Dr. Marshall and myself, will personally superintend its working in the many instances urgently desirable, and its ready portability will, I have no doubt, facilitate its use everywhere in the Bombay Presidency.

(b) Native States, Bombay Presidency.

36. No conservation work appears to have been undertaken in any one of the Native States within the bounds of the Bombay Presidency.

(c) Central India.

37. No work of conserving monumental remains has been carried out in Central India except at Dhar and Mandu in the Dhar State and Sanchi in Bhopal. An account of the useful and valuable work done at the latter place under the personal supervision of the Director-General of Archaeology will duly appear in his Report. My Assistant, Mr. Page, was also there for a few days to help the Director-General. What help he was able to give has been briefly referred to by him on p. 80 of this Report. As regards Dhar and Mandu, the quality of work achieved continues to be satisfactory and greatly redounds to the credit of Mr. Aga, State Engineer, and his assistant Mr. Deshpande, Overseer. It is a matter of exceedingly great delight that the various measures proposed by the Director-General in his three long and exhaustive notes for the proper repairs and upkeep of the old buildings of Mandu have been well-nigh carried out, and it was, therefore, high time to extend our conservation programme, and select, for care and protection, other monuments which stood next, in order of urgency, to those which have just been put into structural preservation. In accordance with the proposal of the Director-General, Mr. Page was, therefore, instructed by me to select such of the monuments at Mandu as were architecturally and historically important and had not hitherto received any attention from us. He has chosen no less than twenty such monuments, some of which are gems of architecture.

(d) Rajputana.

38. In Rajputana no conservation work of importance seems to have been done except at Bayana in the Bharatpur State. A list of the monuments so conserved and the repairs done to them are contained in Appendix N. It will be possible from next year to give a better account of the work done here as on the recommendation of the Director-General, the Government of India have restored Bayana to the Western Circle. No intimation has yet been received as to whether any work was executed in the case of the Dilwara temples on Mount Abu.

(e) Hyderabad.

39. We have heartily to congratulate His Highness the Nizam's Government who have spent during their official year Fasli 1322 (i.e., ending 6th October 1913) not less than Rs. 27,346 on conservation of ancient monuments in their dominions. The most noted of these are the famous caves of Ellora—a group, in one place, of the Buddhist, Brahmanical and Jaina Sects—and the Ajanta caves also in their territory which among others have been receiving their full attention.

40 Tabulated particulars of the works undertaken are given in detail in Appendix O.

XIV. Tour Programme for 1914-15.

41. In para. 18 of the Report I have informed Government that during the year under report I did excavation work at Besnagar in the Gwalior State and was there for nearly three months. The excavations there are a work of two seasons, and could not, therefore, be completed last year. And it would be a pity to leave them as they were, especially as the results achieved were of a very important and valuable character. I, therefore, intend resuming these excavations next cold season and spend another three months at Besnagar. If this work, however, comes to an end earlier, I intend going to Tando Muhammad Khan in Sind and opening the tower, six miles north-west of it and beside the railway line, recommended by Mr. Cousens for excavation purposes. The work of listing the monuments of the Gwalior State to which I introduced Mr. M. B. Garde, Inspector of Archaeology for that State, last cold season, will be pushed forward by him, but I have promised, if I find time, to visit with him some of the archaeologically important places of the State such as the Bagh Caves, Narwar, and others regarding which he stands in need of my advice. And this work it is expected will keep me occupied for a month and a half at least. Work in connection with the Prince of Wales Museum will also engross me. The Trustees have promised to give me an Assistant to help me to arrange the Archaeological Section, and with a view to selecting exhibits and showing him how to do it, I intend undertaking tours with him in Gujarat and Kathiawar. I also intend visiting some of the important caves in order to see in what condition they are and take good photographs which are still a desideratum in our office.

42. The Assistant Superintendent will commence his cold weather tour with a visit to the Portuguese remains at Bassein to inspect the conservation works undertaken upon the recommendations he drew up on his initial visit last year. He will then undertake tours in the Surat and Broach Districts in furtherance of the scheme for inspecting systematically in the various districts the whole of the monuments which have been declared protected and which thus have been deemed worthy of conservation measures. He will then visit Dholka to continue the inspection of the dilapidating monuments there which had to be unavoidably curtailed last season and thus complete the inspection, begun last year, of all the monuments declared protected in the Ahmedabad District.

43. The Baroda Durbar in Mr. Cousens' time had asked him to make proposals for conserving the celebrated monument called Rudramala at Siddhpur and the equally celebrated temple of Surva at Modhera—both in the Kadi Division of the Baroda State. The measures proposed by Mr. Cousens have been carried out, and the Durbar is now anxious to undertake a thorough and comprehensive programme so as to ensure the care and protection of all the important monuments existing in the Baroda territory and has asked for our help and guidance through its Public Works Department. After finishing his work at Dholka, the Assistant Superintendent will, therefore, proceed first to Siddhpur and Modhera to inspect the conservation work done there for the purposes of a report thereon and such further recommendations as may be necessitated, and then visit such places in the Kadi Division as Sunak, Kasara, Sandera and Delmal, the interesting monuments of which have been described by Dr. Burgess and Mr. Cousens in "North Gujarat" which forms Volume XXXII of the Archaeological Survey of India (New Imperial Series). He will thereafter proceed northwards and visit (1) Mount Abu and its marble temples which no archaeological Officer has been able to visit for a long time, (2) the old temples at Amya and Kiradu in the Jodhpur State, whose Durbar has expressed a wish for their preservation, and (3) the archaeological buildings at Ajmer and (4) Bayana in the Bharatpur State which last two have recently been restored to my Circle and in the last of which conservation work of a very important nature in accordance with the recommendations of the Director-General of Archaeology is in progress and stands in urgent need of inspection and guidance.

44. Kanheri Caves will also be visited with a view to note the conservation measures that may prove necessary, and, above all, to inspect the repairs that are being carried out there by the Public Works Department. And with the visits promised to be undertaken to settle conservation queries in quite a number of places in the Presidency and especially in the Karwar District he will be actively occupied in touring until the middle of April next when he will return to Head-quarters as usual for the hot weather.

Poona, 1st July 1914.

D. R. BHANDARKAR, M.A.,
Superintendent,
Archæological Survey of India, Western Circle.





APPENDIX A.

Superintendent's Diary.

1913.

April	1st to 9th	On leave, being appointed to examine in M. A. Epigraphy and Palaeography by the Allahabad University.
	10th to 18th	At Head-quarters
	19th to 20th	Left for Ajmer.
	21st to 27th	Halt at Ajmer.
	28th	... Ajmer to Jaipur.
	29th	... Jaipur to Mandsaur.
August	30th	... Mandsaur to Poona.
	28th	... Left for Bijapur.
	29th to 30th	Halt at Bijapur.
November	31st	... Returned to Head-quarters.
	4th to 5th	Left for Gwalior.
	6th to 8th	Halt at Gwalior.
	9th	... Arrived at Bhilsa.
	10th to 11th	Halt at Bhilsa.
	12th	... Reached Besh.
	13th to 17th	Halt at Besh.
	18th	... Proceeded to Gyarspur.
	19th to 25th	Halt at Gyarspur.
	26th	... Gyarspur to Teonda.
	27th	... Teonda to Baro.
	28th to 3rd	Halt at Baro.
December	4th	... Reached Udaypur.
	5th to 10th	Halt at Udaypur.
	11th to 13th	On the way to Ajmer.
	13th	... Left Ajmer for Besh in Bhilsa.
	16th to 28th	Halt at Besh.
	29th to 30th	On the way to Head-quarters.

1914.

January	1st to 2nd	Halt at Poona.
	3rd to 4th	On the way back to Besh in Bhilsa.
	5th to 9th	Halt at Besh.
March	10th	... Left for Indore.
	12th	... Halt at Indore.
	13th to 14th	Left for Poona.
	15th to 19th	Halt at Poona.
	20th	... Arrived at Ahmednagar.
	21st to 22nd	Halt at Ahmednagar.
	23rd to 24th	Journey from Ahmednagar to Newasa and back to Poona.

Assistant Superintendent's Diary.

1913.

April	1st to 21st	At Head-quarters.
	22nd	... Poona to Lonavla for Karli and thence to Bombay.
	23rd	... Visit to Bassein.
	24th	... Visit to Ambarnath.
	25th	... Visit to Elephanta and return to Poona.
June	21st	... Visit to Karli caves.
August	11th	... Journey from Poona to Nasik.
	12th	... Visit to Pandu Lena caves.
	13th	... Visit to Jhodga via Manmad and back to Nasik.
	14th	... Halt at Nasik.
	15th	... Visit to Sinner.
	16th to 17th	Nasik to Poona.
October	10th	... Arrived at Junnar.
	11th	... Junnar to Ghatghar.
	12th to 13th	Halt at Ghatghar.
	14th	... Ghatghar to Junnar.
	15th	... Junnar to Poona.
	20th	... Poona to Chalisgaon.
	21st	... Visit to Pitalkhora caves.
	22nd	... Visit to Patna.
	23rd	... Return to Poona.

1913.

November	4th to 5th	Poona to Hubli.
	6th	... Visit to Unkal.
	7th	... Visit to Dastikop.
	8th	... Visit to Tambur.
	9th	... Return to Hubli.
	10th	... Halt at Hubli.
	11th	... Hubli to Haveri.
	12th	... Visit to Balambid.
	13th	... Halt at Balambid.
	14th	... Visit to Hangal.
	15th	... Halt at Hangal.
	16th	... Hangal to Balambid.
	17th	... Halt at Balambid.
	18th	... Visit to Naregal.
	19th	... Return to Haveri.
	20th	... Halt at Haveri.
	21st	... Visit to Gutal.
	22nd	... Visit to Chaudanpur.
	23rd	... Visit to Galagnath.
	24th	... Halt at Gutal.
	25th	... Visit to Haralhalli.
	26th	... Gutal to Ranebennur.
	27th	... Visit to Rattehalli.
	28th to 29th	... Halt at Ranebennur.
	30th	... Ranebennur to Gadag.
December	1st	... Halt at Gadag.
	2nd	... Visit to Lakkundi.
	3rd	... Halt at Gadag.
	4th	... Visit to Dambal.
	5th to 6th	... Halt at Gadag.
	7th	... Gadag to Badami.
	8th to 10th	... Halt at Badami.
	11th	... Visit to Banashankari.
	12th	... Badami to Bijapur.
	13th to 23rd	... Halt at Bijapur.
	24th	... Visit to Kunatgi.
	25th to 27th	... Halt at Bijapur.
	28th	... Return to Head-quarters.
	29th to 5th	At Head-quarters.

1914.

January	6th	... Poona to Nasik.
	7th	... Visit to Anjaneri.
	8th	... Arrived at Sanchi.
	9th to 25th	... Halt at Sanchi.
	26th to 27th	... On the way to Sholapur.
	28th	... Halt at Sholapur.
	29th	... On the way to Bagalkot.
	30th	... Do. Aihole.
	31st to 3rd	... Halt at Aihole.
February	4th	... On the way to Pattadakal.
	5th to 6th	... Halt at Pattadakal.
	7th	... On the way to Badami.
	8th to 9th	... Halt at Badami.
	10th to 11th	... On the way to Ahmedabad.
	12th to 18th	... Halt at Ahmedabad.
	19th to 20th	... On the way to Mhow, for Dhar.
	22nd	... Dhar to Mandu.
	23rd to 26th	... Halt at Mandu.
	27th to 28th	... On the way to Ahmedabad via Mhow.
March	1st to 7th	... Halt at Ahmedabad.
	8th	... Visit to Dholka.
	9th to 10th	... Halt at Ahmedabad.
	11th	... On the way to Halol.
	12th to 16th	... Halt at Halol.
	17th to 18th	... On the way to Sanchi.
	19th to 31st	... Halt at Sanchi.

APPENDIX B.

List of Drawings prepared during the Year 1913-14.

Serial No.	Locality.	Title of Drawings.	Remarks.
1369	Nanaghat ...	Cross section and plan of caves ...	Made out.
1370	Bijapur ...	Designs of flower vases ...	Do.
1371	Poladongar ...	Plan, elevation and sections of cave.	Do.
1372	Dhar ...	Plan of Kamal Maula tomb ...	Do.
1373	Mandu ...	Front entrance door-way of Jami Masjid.	Do.
1374	Do. ...	Elevation and section of North wall-Eastern corner of Hushang's tomb.	Do.
1375	Deothan ...	Plan of temple of Mahadeva ...	Do.
1376	Ahmednagar ...	Plan of Nizam Shah's tomb ...	Do.



APPENDIX C.

List of Photographs taken by the Archaeological Survey,
Western Circle, during the year 1913-1914.

Serial No.	Locality.	Title of Photograph.	Size of Negative.
3948	Ghatghar	Entrance to Ghat, general view from east	8½" × 6½"
3949	"	Toll jar with remains of old toll-shed	6½" × 4½"
3950	"	Cave No. 1, general view from north	8½" × 6½"
3951	"	Cave No. 2, general view from south	"
3952	"	" with steps in Ghat	"
3953	"	Two cisterns on proper right of cave No. 1	6½" × 4½"
3954	Pitalkhora	General view of Caves	8½" × 6½"
3955	"	Chaitya Cave (No. 1) interior	"
3955a	"	" paintings on wall	"
3955b	"	" on pillars	"
3956	"	Vihara Cave (No. 2) interior	"
3957	"	" showing structural masonry work	"
3958	"	" another view	"
3959	"	" cells of SE. corner	"
3960	Jhodga	Temple of Mankesvar, general view from south	"
3961	"	" another view	"
3962	"	" from SW.	"
3963	"	" west porch	"
3964	Sinnar	Temple of Gondesvar, general view from NW.	"
3965	Bhilsa	Lohangi Pir or tomb of Shah Jalal Chisti, front view	6½" × 4½"
3966	"	" bell capital	8½" × 6½"
3967	Gyaraspur	Ath Khambha, general view from NE.	"
3968	"	" from SE.	"
3969	"	" pillars	"
3970	"	Bajra Math temple, general view from NE.	"
3971	"	" from NW.	"
3972	"	" door of shrine	"
3973	"	Malade temple, general view from NE.	"
3974	"	" porch from SE.	"
3975	"	" from south	"
3976	"	" interior of main hall	"
3977	"	Image of Mahishasuramardini near the entrance gate of village.	6½" × 4½"
3978	"	Chha Khambha pillar	"
3979	"	Shrine on hill near Mansarovar	8½" × 6½"
3980	"	Another shrine	"
3981	Baro (Baloh)	Gadar Mal's temple, general view	"
3982	"	" from SE.	6½" × 4½"
3983	"	" door of shrine	8½" × 6½"
3984	"	" sculpture of mother and child in the shrine	"
3985	"	" lower portion of right jam of door	6½" × 4½"
3986	"	Entrance gate pillar of Gadgar Mal's temple	"
3987	"	Sol Khambha, general view from SE.	"
3988	"	Sat Madhya, one temple	"
3989	"	" another temple	"
3990	"	Sahaara Linga temple, general view	"
3991	"	" inside shrine	8½" × 6½"
3992	Udaipur	Masjid, general view	"
3993	"	Temple of Nilkantheshvar-Mahadeva back view	"
3994	"	" view from south	"
3995	"	" interior of Sabha-Mandapa.	"
3996	"	" another view...	6½" × 4½"
3997	"	" Vedi, general view...	"
3998	"	" NE. subsidiary shrine.	"
3999	"	Masjid at the back of the temple	"
4000	Basoda	Saikh Karimallah Sahib's tomb, front view	"
4001	"	" from NE.	"
4002	Udaigiri	False Cave No. 1, general view	8½" × 6½"
4003	"	Cave No. 2, image of Vishnu	6½" × 4½"
4004	"	Vina Cave No. 3, front view	8½" × 6½"
4005	"	" Linga in shrine	"
4006	"	General view of caves from east	"
4007	"	Varaha Cave No. 4, front view	"
4008	"	" the goddess Earth	"
4009	"	Sanakanika Cave No. 4, front view	"
4010	"	" door of shrine	"

Serial No.	Locality.	Title of Photograph.	Size of Negative.
4011	Udaigiri	Sanakanika two images to the proper left of door	8 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ "
4012	"	" <i>dvarapala</i> " " "	6 $\frac{1}{2}$ " x 4 $\frac{1}{2}$ "
4013	"	" two images to the proper right of door	8 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ "
4014	"	Verasena's Cave No. 6, general view	"
4015	"	" shrine door	"
4016	"	Seethasayi Cave No. 7, front view	"
4017	"	Lion capital near this cave	"
4018	"	Chandragupta's cave general view	"
4019	"	" door of shrine	"
4020	"	Lion capital near Chandragupta's cave	6 $\frac{1}{2}$ " x 4 $\frac{1}{2}$ "
4021	"	" another view	"
4022	"	Medallion on rock	"
4023	"	Mound on top of northern end of the hill before excavation, general view.	8 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ "
4024	"	" after excavation, view from SE.	"
4025	"	" " view from south	"
4026	"	" " platform top from NE.	"
4027	"	" basement of a shrine at the NE. corner of the platform.	"
4028	"	" lower end of column	"
4029	"	" fragment of column	6 $\frac{1}{2}$ " x 4 $\frac{1}{2}$ "
4030	"	" sculpture No. 1 found at south side of platform...	8 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ "
4031	"	" " No. 2 " " "	6 $\frac{1}{2}$ " x 4 $\frac{1}{2}$ "
4032	"	" " No. 3 " " "	"
4033	"	" " No. 4 " " "	"
4034	"	" " No. 5 " " "	"
4035	"	" " No. 6 " " "	"
4036	"	" " No. 7 " " "	"
4037	"	" " No. 8 " " "	"
4038	"	" " No. 9 " " "	"
4039	"	" torso sculpture No. 10 found on west side of platform.	"
4040	"	" " another view	"
4041	Besh Museum	Buddhist railing, rails	8 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ "
4042	"	Coping stones, front view	"
4043	"	" back view	"
4044	"	Sculpture of Kubera, front view	4 $\frac{1}{2}$ " x 3 $\frac{1}{2}$ "
4045	"	" back view	"
4046	"	Pillar and pilaster of Gupta period	8 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ "
4047	"	Fragment of pillar	6 $\frac{1}{2}$ " x 4 $\frac{1}{2}$ "
4048	"	Another coping and pillar	"
4049	"	Fragment of another pillar	"
4050	"	" another view	"
4051	"	Lion capital of Gupta period	4 $\frac{1}{2}$ " x 3 $\frac{1}{2}$ "
4052	"	Lion sculpture lying with a bawa near Ganesh temple	"
4053	"	Palm capitals	8 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ "
4054	"	Stray sculptures	6 $\frac{1}{2}$ " x 4 $\frac{1}{2}$ "
4055	"	Saptamatas, front view	8 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ "
4056	"	" back view	"
4057	"	Sculpture of Vishnu upper body	"
4058	"	Head of female figure, front view	6 $\frac{1}{2}$ " x 4 $\frac{1}{2}$ "
4059	"	" side view	"
4060	"	Chamukh	"
4061	"	Sculpture of Ganga	4 $\frac{1}{2}$ " x 3 $\frac{1}{2}$ "
4062	"	An old <i>Linga</i>	"
4063	Besh	Elephant with a rider near Ganesh temple	6 $\frac{1}{2}$ " x 4 $\frac{1}{2}$ "
4064	"	Excavation site near Ganesh temple, general view from NE.	8 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ "
4065	"	" another view	"
4066	"	Kham Baba site crocodile capital	6 $\frac{1}{2}$ " x 4 $\frac{1}{2}$ "
4067	"	" rail capital	"
4068	"	" southern open railing	8 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ "
4069	"	" another view	"
4070	"	" general view of Trench D	"
4071	"	" lower part of Vishnu sculpture found in Trench F.	4 $\frac{1}{2}$ " x 3 $\frac{1}{2}$ "
4072	"	" general view of Trenches F G & D	8 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ "
4073	"	" view of Trench F	"
4074	"	" view of cross Trench joining Trenches F and G.	"
4075	"	" general view showing solid railing in Trench G and brick wall below it.	"
4076	"	" enlarged view of brick wall from NW.	"
4077	"	" enlarged view of solid railing in Trench G.	"
4078	"	Kham Baba pillar from north	"

Serial No.	Locality.	Title of Photograph.	Size of Negative.
4079	Besh	Kham Bata pillar from west	8½" x 6½"
4080	"	" " south	"
4081	"	" " east	"
4082	"	showing details of its foundations	"
4083	"	view of Trench in Babajee's house	"
4084	"	west end of north open railing	6½" x 4½"
4085	"	north open railing from east	8½" x 6½"
4086	"	" " from south	6½" x 4½"
4087	"	" " another view	"
4088	"	solid railing pillar on north of Babajee's house.	"
4089	Unkal	Chandramaulishwar temple from NW.	8½" x 6½"
4090	"	Banshankari temple from SE.	"
4091	"	" interior pillar	"
4092	"	Kalamesvara temple, interior door	6½" x 4½"
4093	Tambur	Basavana temple from SW.	8½" x 6½"
4094	"	" " from west	"
4095	"	" carved stone commemorative tablet	"
4096	"	" " " "	"
4097	Balambid	Carved stone commemorative slabs in front of Mahilar Linga temple.	6½" x 4½"
4098	"	" " " "	"
4099	"	Kalameshwar temple from SE.	8½" x 6½"
4100	"	Ramesvar temple from NW.	"
4101	"	" " interior	"
4102	"	Tarkesvar temple from NE.	"
4103	"	" " interior	"
4104	"	" " over mandapa	6½" x 4½"
4105	Hangal	Virabhadra temple from NE.	8½" x 6½"
4106	"	Billeshvar temple from NE.	"
4107	"	Sarveshvar temple interior	6½" x 4½"
4108	"	" interior carved stone image	"
4109	Haveri	Siddeshvar temple from SE.	8½" x 6½"
4110	"	" " interior	6½" x 4½"
4111	Chaudanpur	Mukteshvar temple from SW.	8½" x 6½"
4112	Galagnath	Galageshvar temple from NE.	"
4113	Haralhalli	Someshvar temple from south	"
4114	"	" ceiling of porch	"
4115	Rattihalli	Kadambeshvar temple from SW.	"
4116	Gadag	Someshvar temple from south	"
4117	"	Sarasvati temple from NW.	"
4118	"	" interior from north	"
4119	"	Well near Sarasvati temple	"
4120	Lakkundi	Kasivishveshvar temple from SW.	"
4121	"	" " door	6½" x 4½"
4122	"	" " interior	8½" x 6½"
4123	Dambal	Doddabasappa temple from SW.	"
4124	"	" " from NW.	6½" x 4½"
4125	"	" porch from east	"
4126	"	" interior	8½" x 6½"
4127	"	Someshvar temple from SW.	"
4128	Bettageri	Malrayankatti, collection of carved stones	"
4129	Badami	Cave No. 1 from NE.	"
4130	"	" columns	6½" x 4½"
4131	"	Cave No. 2 from north	8½" x 6½"
4132	"	Entrance door to Cave No. 3	6½" x 4½"
4133	"	Cave No. 3 from NE.	8½" x 6½"
4134	"	Cave No. 4 from NW.	"
4135	"	Tomb near caves at foot of hill from SE.	"
4136	"	Bhutanatha temple from NW.	"
4137	"	" " from west	6½" x 4½"
4138	"	Ramalinga temple from west	8½" x 6½"
4139	"	Suvali temple on hill from SE.	6½" x 4½"
4140	"	" " from NE.	8½" x 6½"
4141	"	Temple No. 1 on hill from NE.	"
4142	"	View of temples Nos. 1 and 2 on hill	6½" x 4½"
4143	Banshankari	General view of the tank from NW	8½" x 6½"
4144	"	" " from east	6½" x 4½"
4145	"	" " from east	"
4146	"	Old temple at Banashankari	"
4147	Bijapur	Taj Baudi from NE.	8½" x 6½"
4148	"	" " from SE.	6½" x 4½"
4149	"	" " from SE.	"
4150	"	" " from north	"
4151	"	Jalamandir from SW.	"

Serial No.	Locality.	Title of Photograph.	Size of Negative.
4152	Bijapur	Zanjiri masjid from NE.	6½" × 4½"
4153	"	Bukhari masjid from SE.	"
4154	"	" front entrance door from east	"
4155	"	Kamarkhi Gumbaz from south	"
4156	"	Gol Gumbaz based dome from NE.	"
4157	"	Ibrahim I Jami masjid from NE.	"
4158	"	Andu masjid from SE.	"
4159	"	Ikhlas Khan's masjid from east	"
4160	"	Mulla masjid from SE.	"
4161	"	Chanda Bandi from SE.	"
4162	"	Citadel gate from NE.	"
4163	"	Shahapur gate from west	"
4164	"	Allapur gate from NE.	"
4165	"	Bahmani gate from NW.	"
4166	"	Dekkani Idgah from SW.	"
4167	"	Mustafa Khan's masjid from SE.	"
4168	"	Ibrahim Rauza from NE.	8½" × 6½"
4169	"	Asar Mahal from NE.	"
4170	"	Sat Manzli from NW.	"
4171	"	Jod Gumbaz from SE.	"
4172	"	Afzul Khan's wives' tombs from SE.	"
4173	"	Jami masjid from SE.	"
4174	"	Afzul Khan's masjid from SE.	"
4175	Ibrahimpur	Ibrahimpur well from east	"
4176	Aiholi	Durga temple No. 3 from SW.	6½" × 4½"
4177	"	Temple No. 14 from SE.	8½" × 6½"
4178	"	" No. 15 from SE.	"
4179	"	" No. 21 from SE.	"
4180	"	" No. 24 from NE.	"
4181	Pattadkal	Jaina temple from SW.	"
4182	"	Galagnath temple from SW.	6½" × 4½"
4183	"	Sangameshvara temple from NW.	"
4184	Ahmedabad	Jami masjid from east	8½" × 6½"
4185	"	Rani Rupvati's mosque from east	"
4186	"	Ahmad Shah's mosque from NE.	"
4187	"	Moti Shahi Bagh (Commissioner, N. D.'s residence)	"
4188	"	Malik Isan-ul-Mulk's mosque from NE.	"
4189	"	" " interior NE.	"
4190	"	Divan Shah Raju's Rauza from SW.	"
4191	"	Sultan Sahib's Rauza, Batwa, from SW.	"
4192	"	Shaikh Hasan Mahamad Chisti's mosque from NW.	6½" × 4½"
4193	"	" " interior from NE.	8½" × 6½"
4194	"	Abu Turab's mosque from NE.	6½" × 4½"
4195	"	Baba Lului's mosque from NE.	"
4196	"	Achut Bibi's mosque, interior from NW.	"
4197	"	Siddi Basir's minars and tombs from west	"
4198	"	Darya Khan's tomb	8½" × 6½"
4199	Adalaj	Step well	"
4200	Dholka	Balol Khan Qasi's mosque	"
4201	Dhar	Kamal Maula, interior from NE.	6½" × 4½"
4202	"	Lat masjid from SE.	8½" × 6½"
4203	"	" from east	"
4204	"	" from NE.	"
4205	Mandu	Baz Bahadur's palace from NE.	"
4206	"	Jahaz Mahall from SE.	"
4207	"	Sir T. Roe's residence	"
4208	"	Dai ki Chhoti Bahinka Mahall	"
4209	"	Dai ka Mahall from SW.	"
4210	"	The Nilkanth from north	"
4211	"	Hathi Mahall	6½" × 4½"
4212	"	Songarh gate from south	"
4213	"	Darya Khan's tomb	"
4214	Halol	Shikandar Shah's tomb from SE.	8½" × 6½"
4215	Champanir	Jami masjid	"
4216	"	Halol gate	"
4217	"	Sat manzli	"
4218	"	Bohra masjid	"
4219	"	Six arched gateway	"
4220	"	Granary Pavagarh hill from SW.	"
4221	"	Lilla Gumbaz view of dilapidated dome	"
4222	"	" " "	"
4223	"	Brick minars of dilapidated mosque from NE.	6½" × 4½"
4224	"	Nagina masjid	"
4225	"	Tomb in front of Kevda masjid	"

APPENDIX D.

List of Inscriptions copied during the year 1913-1914.

Serial Number.	Place.	Position of Inscription.
2610	Ghatgur	Nanaghat inscription I.
2611	"	" II.
2612	"	" III.
2613	"	" IV.
2614	"	" V.
2615	"	" VI.
2616	"	" VII.
2617	Pitalkhora	In Cave I.
2618	"	" II.
2619	"	" III.
2620	"	" IV.
2621	"	" V.
2622	"	" VI.
2623	"	" VII.
2624	Bhilsa	Lohangi hill in the Masjid I.
2625	"	" II.
2626	"	" III.
2627	"	" IV.
2628	"	" V.
2629	"	" VI.
2630	"	Bija Mandal on a wall inside the room.
2631	"	" on a pillar in the hall.
2632	Udaigiri	Sanakanika Cave, on the right of the entrance.
2633	"	In Virasena's Cave.
2634	"	Chandragupta Cave, on right pillar inside.
2635	"	" " left " "
2636	Besnagar	On Kham Baba pillar.
2637	Gyaraspur	On a slab in Patwar's house.
2638	"	On another slab "
2639	"	On a pillar in Atkhamba.
2640	"	Temple of Malade on a porch pillar.
2641	"	In Jami Masjid.
2642	"	Sanskrit inscription in another Masjid.
2643	Baro	On a stone near Jaina temple to the NW. of tank.
2644	Pathari	On a stone near Ramrao to the east of tank.
2645	"	On Bhimgaja pillar.
2646	"	On left pillar of temple of Sahasra Linga.
2647	Udaipur	Temple Nilakanthesvara, east porch, on loose slab.
2648	"	" " " on another slab.
2649	"	" " " on right pillar.
2650	"	" " " II.
2651	"	" " " III.

Serial Number.	Place.	Position of Inscriptions.
2652	Udaipur	Temple Nilakanthesvara, east porch, on right pillar IV.
2653	"	" " " V.
2654	"	" " on left pillar.
2655	"	" " on left jamb.
2656	"	" " on left parapet.
2657	"	" " north porch, on right pillar.
2658	"	" " on doorway SW. of temple.
2659	"	" " NW. of temple.
2660	"	On a wall of gallery at the north of Masjid.
2661	Mandasor	On a loose stone.
2662	"	" " on another side.
2663	"	On the entrance of the fort.
2664	"	" " another.
2665	"	" " third.
2666	Vasavad	On a niche of the masjid.
2667	Ittagi	On a slab in Patel's house.
2668	Arlesvara	Temple of Kadambesvara on a pillar in Sabhamandapa, east side.
2669	"	" " " north side.
2670	"	" " on another pillar in Sabhamandapa, east side.
2671	"	" " " south side.
2672	"	" " " at the top.
2673	"	" " on lintel in Sabhamandapa.
2674	"	" " another below same.
2675	Balambid	Kalamesvara temple, loose stone slab outside.
2676	"	" " " another
2677	"	Ramesvara temple, loose stone slab outside.
2678	"	" " " in Sabhamandapa.
2679	"	" " " "
2680	"	" " " "
2681	"	" " " "
2682	"	" " " "
2683	"	" " " "
2684	"	" " " "
2685	Naregal	Sarvesvara temple, loose stone outside.
2686	"	" " " in Sabhamandapa.
2687	"	" " " "
2688	"	" " " "
2689	"	" " " "
2690	"	" " " "
2691	"	" " " "
2692	"	" " " "
2693	"	" " " "
2694	"	" " " "

APPENDIX E.

Annual Expenditure of the Survey.

		Ra.	a.	p.	Ra.	a.	p.
Salaries—							
Superintendent	...	6,462	14	5			
Assistant Superintendent	...	4,616	2	1			
Establishment	...	4,423	1	7			
Temporary establishment	...	23	11	10			
Plague allowances	...	80	0	0			
	Total ...	Ra.	15,605	13	11		
Travelling Allowances—							
Superintendent	...	1,940	11	0			
Assistant Superintendent	...	1,651	2	0			
Establishment	...	2,197	7	0			
	Total ...	Ra.	5,789	4	0		
Supplies and Services—							
Excavations	...	758	14	2			
Photography and Photomaterial	...	401	11	6			
Purchase of, and repairs to, tents	...	71	2	0			
	Total ...	Ra.	1,231	11	8		
Contingencies—							
Purchase of Stationery	...	20	0	0			
Purchase of Books	...	229	3	0			
Liveries of peons	...	22	8	0			
Rents, Rates and Taxes	...	672	0	0			
Postage and Telegram Charges	...	163	12	0			
Conveyance of kit, etc.	...	597	13	0			
Purchase of, and repairs to, Furniture	...	135	14	6			
Pay of Menials	...	45	0	0			
Miscellaneous	...	201	13	6			
Purchase of Instruments	...	17	14	0			
	Total ...	Ra.	2,105	14	0		
	Grand Total ...	Ra.	24,732	11	0		

APPENDIX F.

The following is a list of books added to the office library during the year 1913-14 :—

Visvakarma, Parts III, IV, V and VI.

Papers on preservation of Historic sites and Ancient Monuments and Buildings in the Western Indian Colonies.

Numismata Orientalia* (Coins of Southern India).

The Basis for Artistic and Industrial Revival in India, by Havel.

Annual Progress Report of the Superintendent, Hindu and Buddhist Monuments, Northern Circle, for 1911-12.

Annual Progress Report of the Superintendent, Archaeological Survey, Burma Circle, for the year 1912-13.

Annual Progress Report of the Assistant Archaeological Superintendent for Epigraphy, Southern Circle, for the year 1912-13.

Annual Progress Report of the Superintendent, Archaeological Survey, Southern Circle, for the year 1912-13.

Annual Progress Report of the Superintendent, Archaeological Survey, Frontier Circle, for the year 1912-13.

Annual Progress Report of the Superintendent, Archaeological Survey, Eastern Circle, for the year 1911-12.

Archaeological Survey of India, Annual Report, Part I, for 1911-12.

Annual Report on the Architectural Work in India for the year 1911-12.

Brahma Alphabet by Buhler.

Brigg's History of the Rise of the Muhammadan Power in India, in four volumes.

Report on the Coins dealt with under the Treasure-Trove Act in the Central Provinces during the year 1912-13.

Book of Indian Eras by Cunningham.

Alberuni's India, by Sachau.

Buddhist India by Rhys Davids.

Medieval India by Lade-Poole.

Sanskrit Literature by MacDonell.

South-Indian Inscriptions, Vol. II.

Twenty-eighth Annual Report of the Bureau of American Ethnology for 1906-1907.

Bureau of American Ethnology Bulletin No. 54.

Do. do. No. 53.

Repertoire D' Art Et D' Archéologie, 1912.

Do. do. do. 1913.

Do. do. do. 1913.

Original Inscriptions collected by King Bodawpaya in Upper Burma and now placed near the Patodawgyi Pagoda, Amarapura.

Roman Sculpture, Vols. I and II, by Eugenie Strong.

Nature in Greek Art by Emanuel Lowy.

Architecture of Ahmedabad by Hope and Fergusson.

Photographs of Architecture, &c., in Western India by Major Gill.

The following books of the Bombay Sanskrit Series :—

Pancha-Tantra, Parts I, II, III, IV and V.

Nagoji Bhatta's Paribhashendusekhara, 4 Vols.

Raghuvamsha of Kalidasa, cants I-VI.

Do. do. VII XIII.

Do. do. XIV-XIX.

Malati-Madhava.

Vikramorvasiyam.

Bana's Kadambari, Part I.

Do. Part II.

- Subhashitavali of Vallabhadeva.
 Hitopadesa of Narayana.
 Gaudavaho of Vakpati.
 Mahanarayanopanishad and Dipika.
 Sarngadharapaddhati.
 Naishkarmyasiddhi with Chandrika of Jnanottama.
 Rigveda Hand-book, Part I.
 Do. do. Part II.
 Hymns from the Rigveda.
 Dasakumara-charita.
 Aphorisms on the Sacred Law of the Hindus by Apastamba, Part I.
 Do. do. do. Part II.
 The Rajatarangini of Kalhana, 3 Vols.
 Patanjalisutram.
 Parasara-Dharma-Samhita, Vol. I, Part I.
 Do. do. Vol. I, Part II.
 Do. do. Vol. II, Part I.
 Do. do. Vol. II, Part II.
 Do. do. Vol. III, Part I.
 Nyayakosa.
 Mrichchhakatika.
 Navasahasanka-charita, Part I.
 Bhattikavya, Vols. I and II.
 Kumarapala-charita.
 Rekhanigita, Vols. I and II.
 Ekavali, Vol. I.
 Prataparudrayasobhushanam.
 Harsha-charitam.
 Vyakarana Mahabhashya of Patanjali Vols. I, II and III.
 Upanishadvakya Kosa.
 Aims and Methods in Archaeology by Petrie.
 General Administration Report (Bombay Presidency), 1912-13.
 Gazetteer of the Bombay Presidency—
 Ahmednagar, Vol. IV-B.
 Do. second edition, Vol. XVII-B.
 Rachnagiri and Savantvadi, Vol. X-B.
 Dharwar and Savnur, Vol. XXII-B.
 Thana and Jawhar, Vol. XIII.
 Kanara, Vol. XV-B.
 Poona and Bhor, Vol. XVIII-B.
 Sholapur and Akalkot, Vol. XX-B.
 Bijapur, Jath and Daphlapur, Vol. XXIII-B.
 Satara, Phaltan and Oandh, Vol. XIX-B.
 Nasik and Surgana, Vol. XVI-B.
 Indian Antiquary (current numbers).
 Epigraphia Indica (do.).
 Journal of Indian Art and Industries (current numbers).
 Journal of the Royal Asiatic Society London (current numbers).
 Bombay Quarterly List.
 Quarterly lists of Gazetted officers in the Archaeological Survey Department.

APPENDIX G.

List of Coins and Antiquities acquired by Different Museums.

The Honorary Secretary, Bombay Branch, Royal Asiatic Society informed me that during the year under report, 78 old coins were added to the coin cabinet of that institution, of these 8 were gold, 34 silver, 16 copper and 20 mixed metal. Of the total, 3 gold were presented by the Chief of Jath in the Bijapur District, and 2 copper were received from the Under Secretary to the Government of Bombay, General Department, and the rest were acquired from different Governments under the Treasure Trove Act.

The coins are of the following description :—

3 Achyuta Raya (probably)—

Obv.—Blank.

Rev.—Double headed eagle monster holding up small elephants in its beaks and claws (presented by the Chief of Jath).

1 Sri-Pratapadeva Raya—

Obv.—Shri-Pratapadeva Raya.

Rev.—God and Goddess seated.

} Found in the Sholapur District.

Sultans of Delhi—Gold.

1 Sultan Muhammed (Ahmed) Malik—

Obv.—Sultan Muhammed (Ahmed) Malik.

Rev.—Sultan-ul-Adil.

} Found in Arcot District.

1 Venitian Ducat, gold (found in Ratnagiri District).

2 Gold, not decipherable (found in the Champaran District, Behar and Orissa).

5 Silver, Larins (found in the Ahmednagar District).

Sultans of Delhi—Silver.

5. Muhammed bin Tughlaq (found in the Shahajahanpur District, U.P.).

Mughal Coins—Silver.

11 Akbar—

Mint Fettehpur, 4.

" Jaunpur, 1.

" Fettehpur, 1.

" Ahmedabad, 1.

" Tatta, 1.

" Lahore, 1.

" Urdu Zafar Querim, 1.

Ornamental design, 1.

} Found in the Mirzapur District, U.P.

} Found in the East Khandesh District.

1 Aurangzeb, Barhanpur Mint (found in the Ahmednagar District).

9 Shah Alam, Benaras Mint (found in the Harda District, U.P.)

1 Shah Alam II, Benaras Mint (found in the Muradshah District, U.P.).

Mysore Coins—Silver.

1 Tipu Sultan, Sheringapattam Mint (found in the Satara District).

1 French East India Silver, Arcot Mint (found in the Satara District).

Malwa Coins—Copper.

1 Muhammed Shah II (found in the Tonk State).

Jaunpur Coins—Copper.

12 Husein Shah of Jaunpur (found in the Sultanpur and Jalaum Districts, U.P.).

Sultans of Delhi—Copper.

1 Muhammed Shah—

Obv.—Muhammed Shah.

Rev.—Sultan Allauddin.

} Found in the Krishna District, Madras.

2 Chhatrapati Coins, Copper (presented by the Under Secretary to Government, General Department, Bombay).

Sultans of Delhi.—Mixed metal.

7 Mubarak I.	} Found in the Shahajahanpur District, U.P.
5 Mahammed II.	
4 Mahammad bin Tughlaq.	
2 Masaud.	} Found in the Sultanpur District, U.P.
2 Nasiruddin.	

Old teak-wood carving, removed from a house at Ahmedabad which was being demolished, was purchased by the Trustees of the Prince of Wales Museum, Bombay, the Prince of Wales Museum, and a small gold crown (apparently belonging to an image) which was dug up at Elephanta during the excavation for the Port Trust works was received from Government.

The Curator, Victoria and Albert Museum, Bombay, supplied me with a copy of the Annual Report of his museum in which he says as follows about the work done for the Archæological Section :—

“The specimens in this section have all been re-arranged, and a descriptive catalogue of the entire collection has been prepared.

“Six copper coins found at Saranghpur in the State of Dewas (Junior) were presented by the Deawn to His Highness the Raja of Dewas.

“Work in connection with the preparation of the Old Bombay Room progressed satisfactorily but owing to the delay in the delivery of the full number of photographs of Old Bombay by Mr. Claridge, the room remains closed to the public. Nearly half the number of photographs has been received, and these are now framed and hung up on the walls.

“The two Relief maps of the island of Bombay in 1666 and 1914, respectively, have been completed and the models placed in the new cases prepared for them. A large scale map of the town and island of Bombay has also been framed and put up in position.

“The Commissioner was pleased, on my recommendation, to sanction the purchase of a set of forty-five photographs of the Governors of Bombay beginning from Humphrey Cook to His Excellency Lord Sydenham. The photographs will be purchased from Messrs. Bourne and Shephard, who have also undertaken to frame these in a suitable manner. The cost will be Rs. 94.

“A short descriptive account of the history of Bombay is in course of preparation.”

To the Bijapur Museum, of which I am Secretary and Honorary Curator, were added one old Persian prayer carpet from the Jami Masjid and one old stone dumbell presented by the Jagirdar of Anna Hosur.

The Secretary, Barton Museum, Bhavnagar, and the Victoria Hall Public Library and Museum, Udaipur, report of no new acquisitions for their museums.

The Curator, Watson Museum of Antiquities, Rajkot, has sent me the following list of acquisitions made for his museum :—

- (1) Some 20 Kshatrapa coins (Silver) of different princes of which one of Damasena, son of Rudrasena, can be clearly made out and has the year 156 on it.
- (2) 50 silver coins of King Kumaragupta Mahendraditya.
- (3) 35 Gadhiya coins presented by Capt. A. S. Meek, Political Agent, Gohilwad.

Inscription Slabs.

(1) A memorial stone dug out from Manekchok in Porbandar, having on it an inscription, dated 1600 V. S., recording the death of a gadhavi. It was presented by the Administrator, Porbandar State.

(2) A photograph of an inscription at Adalaj near Ahmedabad and a rubbing of one dated V. S. 1193 in the temple of Vinayaka near Gata, four kos from Dhrangadhra.

The Superintendent, Rajputana Museum, Ajmer, reports to me that the following acquisitions were made for his museum during the year 1913-14.

Ajmer.

Inscription.

Bayana inscription of the time of the Yadava prince, Vijaya or Vijayapala. It is dated Sam 1100 (A. D. 1043).

Images and Sculptures.

An image of Revanta.

A part of a sculpture representing a female playing on Vina.

A Sati pillar.

Gold Coins.

Pratapdev Raya of Vijaynagar.

Venitian Ducat.

Silver.

Mahakshatraps Rudrasena I, son of Mahakshatraps Rudrasinha I.

Do.	Rudrasinha I,	do.	Rudradaman.
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Do.	Damasena,	do.	Rudrasinha I.
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Do.	Yasodaman,	do.	Damasena.
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Do.	Isvardatta.		
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Do.	Rudrasena II,	do.	Kshatraps Viradaman.
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Kshatraps Yasodaman,	do.	Mahakshatraps Damasena.
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Do. Visvasinha,	do.	Rudrasena II.
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Do. Visvasena,	do.	Bhartridaman.
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Mahakshatraps Bhartridaman,	do.	Rudrasena II.
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Do. Damajadasri,	do.	Damasena.
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Do. Vijaysena,	do.	do.
----------------	-----	-----

Kshatraps Viradaman,	do.	do.
----------------------	-----	-----

Do. Rudrasinha,	do.	Svamijivandaman.
-----------------	-----	------------------

Do. Vijaysena,	do.	Mahakshatraps Damasena.
----------------	-----	-------------------------

Do. Bhartridaman,	do.	do. II.
-------------------	-----	---------

Do. Yasodaman,	do.	Kshatraps Rudrasinha II.
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Mahakshatraps Svami Rudrasena III, son of Maha Kshatraps Svami Rudra Daman II.

Kshatraps Damajadasri II,	do.	Rudrasena.
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Muhammad Shah.

Akbar.

Aurangzeb.

Shah Alam II.

Alamgir II.

Muhammad Shah I of Gujarat.

Muzfar Shah II and one of the Tipu Sultan.

Copper Coins,

Mahammad Shah II of Malwa.

Mahmud Shah II (Bramhani).

Ahmad Shah II (do.).

Humayun Shah (do.).

Katimullah (do.).

Inscriptions Copied.

A fragmentary inscription of the time of Guhila prince, Bhartri or Bhartribhat II of Mewar. It is dated Sam. 1000 (A. D. 943).

A fragmentary inscription of the time of the Guhila prince, Amba Prasad, the son of Sakti Kumara of Mewar.

A fragmentary inscription of the time of the Guhila prince, Naravahana.

An inscription of the time of the Yadava prince, Sahanaapala of Karauli. It is engraved on the pedestal of an image which is broken off. It is dated Samvat 1240 (A. D. 1183).

Portraits of

Maharaja Madhosingji of Kotah.
 Do. Kishorsingji do.
 Do. Mukandsingji do.
 Jhala Jhalimsingji, Minister of Kotah.
 Maharaval Gangadasji of Dungarpur.
 Do. Askaranji of do.
 Do. Poonjaji of do.
 Maharaja Kishansingji of Kishangarh.
 Do. Gopalsinghji of Karnali.
 Do. Manikpalji of do.
 Do. Harsakopalji of do.
 Nawab Amtrakhan of Tonk.
 Rao Bikoji of Bikaner.
 Raja Raisinghji of Bikaner.
 Raja Karansinghji of Bikaner.
 Maharaja Anupasinghji do.
 Rajkumar Padamsinghji do.
 Maharaja Jawantsinghji of Jodhpur.
 Do. Gajasinghji of do.
 Do. Ajitsinghji of do.
 Do. Ramsinghji of do.
 Do. Vijaysinghji of do.
 Do. Mansinghji of do.
 Do. Abheysinghji of do.
 Rao Jodhaji of do.
 Do. Siyaji of do.
 Do. Ranumatji of do.
 Do. Maldevji of do.
 Motaraja Udaysinghji of do.
 Maharaja Bakhtsinghji of do.
 Rathor Durgadasji of Marwar.
 Singhi Indrarajui of Jodhpur.

The Curator of the Bahadurkhanji Museum, Junagarh, informed me that
 no new acquisitions were made for that museum during
 the last year.

The following is the list of Coins, &c., received for the Archaeological
 Museum, Poona, during the year 1913-14.

Received as presents—

Gold Coins.

- | | |
|--|---|
| 1 of Murad III bin Selim. | } These were found at Dapoli in the Ratnagiri District. |
| 1 Venitian Ducat. | |
| 1 of Sri Pratapadevaraya of Vijayanagar found in the Southern Maratha Country. | |
| 1 of Muhammad Tughlaq. | } These were found at Jabalpur. |
| 1 of Firoz III. | |
| 1 of Muhammad bin Muhammad 14th king of Malwa. | |
| 1 square. | |
| 1 of Khalifs, found at Thirachittambalam, Tinnevely District. | |
| 1 South Indian gold fanam, found at Akkadwathal Dena, Caddapa District. | |

Silver Coins.

- | | |
|--|---|
| 1 of Aurangzeb. | } Found at Sangameshwar in the Ahmednagar District. |
| 5 Larims. | |
| 1 Tipu Sultan. | } Found in the Southern Maratha Country |
| 1 of French East India Company. | |
| 3 Coins found in the Basti District, United Provinces. | |
| 9 Do. Mirzapur District, United Provinces. | |
| 1 Do. Moradabad District, do. | |

2 Coins found in the Sitapur District, United Provinces.

2	Do.	Rae Bareilly District,	do.
5	Do.	Hardoi District,	do.
1	Do.	Aligarh District,	do.
1	Do.	Moradabad District,	do.

7 Coins of Akbar, found at Vakod Digar Jamsar Taluka, East Khandesh District.

1 Coin found in the Moradabad District, United Provinces.

1	Do.	Bara Banki District,	do.
3	Do.	Rae Bareilly District,	do.
2	Do.	Meerut District,	do.
3	Do.	Allahabad District,	do.

1 Roman Denarius of Augustus, found at Kathargunny Coimbatore District, Madras.

1 Do. Tiberius, found at Kathargunny Coimbatore District, Madras.

1 Coin of Nasir Shah of Malwa.

Billon Coins.

7 Coins found in the Sultanpur District, United Provinces.

11	Do.	Jalam District,	do.
1	Do.	Rae Bareilly District,	do.
4	Do.	Sultanpur District,	do.
2	Do.	Rae Bareilly District,	do.

Copper Coins.

23 Coins found in the Shahjahanpur District, United Provinces.

2 Do. Etah District, do.

7 Do. of Bahmani Kings of Gulburga detailed as below :—

1 (no date) of Ahmed Shah II.

1 (do.) of Humayun Shah,

1 (do.)

1 of Mahmud Shah II (date doubtful).

1 no name of King.

1 (no date) of Katimullah.

2 Do. found in the Jahanpur District, United Provinces.

Lead Coins.

4 Andhra coins found in the Anantpur District, Madras.

Articles purchased and presented by the Director General of Archaeology in India—

2 Old Brass vases.

1 Court of Rama.

APPENDIX H.

Treasure Trove.

Regarding the old coins acquired by the Government of Bombay under the Treasure Trove Act, VI of 1878 and forwarded for examination and distribution to the Bombay Branch of the Royal Asiatic Society, the Honorary Secretary of that institution has favoured me with a printed copy of the Society's Report for the year 1913, and in it it is stated that there were 905 coins under examination at the end of the last year and 386 were received during the year under report. The latter included 6 gold, 1 gold ear-ring and 5 silver from the Mamlatdar of Shirpur, West Khandesh; 24 silver and 1 copper from the Mamlatdar, Halol, Panch Mahal; 29 silver from the Collector of East Khandesh; 1 gold from the Collector of Ahmednagar; 8 silver and 2 copper from the Collector of Larkhana; 1 silver from the Mamlatdar of Chiplun; 1 silver and 4 copper from the Collector of Kaira and 113 from the Akkalkot State. Of these, 906 (905 under examination of last year and 1 gold from the Collector of Ahmednagar received in 1913) were examined and reported to Government. They were examined for the Society by Mr. F. J. Thanawala and Prof. S. R. Bhandarkar. 215 from Halol, 12 from Shirpur, 5 from Kaira and 113 from Akkalkot are under examination, 29 from East Khandesh, were sent to the Mint for disposal and one from Chiplun and 10 from Larkhana were returned as they were found to possess no historical and numismatic importance. 16 silver and 28 copper received from the Collector of Nasik in 1912 were also returned as they were without numismatic value.

The selected coins were distributed among the following institutions and the balance after distribution forwarded to the Mint Master for sale.

Institutions	Gold.	Silver.	Total.
The Prince of Wales Museum of Western India	28	28	56
The Indian Museum, Calcutta	14	24	38
The Madras Museum	11	20	31
The Provincial Museum, Lucknow	8	18	26
The Lahore Museum	7	16	23
The Nagpur Museum	4	16	20
The Public Library, Shillong	4	16	20
The Archaeological Museum, Poona	3	15	18
The Peshawar Museum	3	15	18
The Quetta Museum	2	14	16
The Ajmer Museum	2	14	16
The Rajputana Museum	2	14	16
The Asiatic Society, Bengal	2	14	16
The Bombay Branch Royal Asiatic Society	2	14	16
The British Museum	2	13	15
The Fitzwilliam Museum, Cambridge	2	13	15
For sale at Mint	31	515	546
Total	127	779	906

While excavating the earth in the Galagnath temple at Pattadkal, Taluka Badami of the Bijapur District a treasure was found on the 25th day of November 1912. It consisted of 15 pieces of gold of the approximate value of Rs. 27-10-0. In the absence of any information regarding the gold pieces dug out, it is difficult to say anything about their numismatic value.

Shenu valad Vashya Bhil of Hivarkhed Budruk, Jamner Taluka while excavating foundation in the building site found a treasure, on the 21st day of April 1913 consisting of 161 Chandvadi rupees, and some other silver ornaments. The Chandvadi rupees are found in many places and have no special numismatic interest.

In the forest land situated at the village of Vadgaon, Taluka Khed, Poona District, one Shankar Laxman Bavle found a treasure consisting of 7 gold coins, viz., "Hon" (whole) impressed upon; 10 gold small coins and 1 piece of a "Hon." These I hope will prove of some interest.

APPENDIX K.

Protected Monuments.

The undermentioned monuments in the Kolaba District were declared "Protected" and confirmed as such by Government Resolutions, General Department, Nos. 6117 of 20th August and 8804 of the 3rd December 1913, respectively.

Place where the monument is situated.		Name or description of monument.	Class.
Taluka.	Town or Village.		
Karjat	Kondhane	Caves	II (a).
Do.	Ambiwli	Cave	II (a).
Do.	Peth	Kotali Fort with two iron guns and one bronze gun.	III.
Do.	Do.	Cave near last	II (a).
Alibag	Alibag	Hirakote old Fort	III.
Do.	Korlai	Old Fort	III.

In the Ahmednagar District the undermentioned monument has been declared "Protected" by Government Resolution, General Department, No. 4991 of 7th July 1913.

Place where the monument is situated.		Name or description of monument.	Class.
Taluka.	Town or Village.		
Nagar	Within the limits of the Ahmednagar Cantonment.	Damri Masjid	I (b).

The following monuments at Pattadkal in the Badami Taluka of the Bijapur District have been declared "Protected" as per Government Resolution, General Department, No. 4676, dated 24th June 1913.

Place where the monument is situated.		Name and Description of monument.	Class.
Taluka.	Town or Village.		
Badami	Pattadkal	The great temple of Virupaksha in use	I (b).
Do.	Do.	The temple of Papanath at the south-east corner of the village.	I (a)
Do.	Do.	The temple of Sangamesvara to the north of Virupaksha's.	II (a)
Do.	Do.	The temple of Mallikarjuna close to and at the north-west corner of Virupaksha's.	Do.
Do.	Do.	Kashivisvesvara temple close beside and on the north side of Mallikarjuna's.	Do.
Do.	Do.	Galganath temple on the north of Sangamesvara temple.	Do.
Do.	Do.	Jambulinga temple on the west of Galganath temple.	Do.
Do.	Do.	Kadsiddhesvara temple to the north of the last named and on the outside of the north wall of the village.	Do.
Do.	Do.	The Jaina temple included in the Mission area about $\frac{1}{2}$ of a mile from the village on the west.	Do.
Do.	Do.	A dolmen on the south side of the road leading from the village to Badami about a mile to the west.	Do.

In supersession of Government Notification No. 1238, dated the 4th March 1909 and so much of Government Notification No. 2704-A, dated the 26th May 1909 as relates to Thar and Parkar, by Government Resolution No. 6210 of the 23rd August 1913, General Department, the undermentioned monuments in the Thar and Parkar District have been declared "Protected" and confirmed as such by Government Resolution No. 3541, General Department, dated 5th May 1914.

Place where the monument is situated.		Name or description of the monument.	Class.
Taluka.	Town or Village.		
Nagar	Bhodesar	Temple No. 1	II (a).
Do.	Do.	Do. 2	II (a).
Do.	Do.	Do. 3	II (a).
Do.	Do.	Do. 4	II (a).
Do.	Gori	Do.	I (b).
Do.	Virwah	Do.	II (b).

By Government Resolution No. 8756, General Department, dated the 2nd December 1913, the undermentioned monuments in the Kolaba District have been declared "Protected" and confirmed as such by Government Resolution No. 2316 of 24th March 1914, General Department.

Place where the monument is situated.		Name or description of the monument.	Class.
Taluka.	Town or Village.		
Alibag	Alib	Kolaba Port (900 feet from north to south and 350 feet from east to west) containing— (1) The Sarja Kot. (2) The North Causeway. (3) The Manik Chawda. (4) The South Causeway. (5) The Talghar. (6) The Padmawati shrine. (7) The temple of Gulbai or Mahishasuri. (8) The shrine of Bhawani. (9) The Thorla Wada. (10) The Reservoir with Apsaras. (11) The temple of the Ganpati Panchayatan. (12) The temple of Mahadev. (13) The shrine of Maruti. (14) The temple of Kanoba. (15) The shrine of Yeshwantdari. (16) The tomb of Muhammadan Saint. (17) The temple of Bapdeo.	II (a).

Agreements.

The Collector of Surat, reported in his letter No. Mis. 147, dated the 17th May 1913 that of the three marginally noted monuments Nos. 1 and 2 are in charge of the Church Trustees, Surat, and No. 3 of the Executive Engineer, and are maintained at Government expense and therefore no further action is necessary.

Old English and Dutch tombs, Surat City.
Old American tombs, Surat.
Vaux's tomb at Dhan, Taluka Olpad.

The Collector, Sholapur, informed this office in his letter No. 4105 of 15th August 1913 that he had executed agreements with the owners of the marginally noted monuments in his district, as authorized by Government Resolution No. 7246 of 8th October 1913.

The old Fort, Sholapur.
Old temple and viragals or sculptured stones and old double shrined temple, Vela-pur.

The Collector of Hyderabad, Sind, informs this office in his letter No. 4135

Tombs of Ghulam Shah
and Ghulam Nabi Kalhora,
Hyderabad.

Buddhist Stupa, Daulatpur.
Tomb of Nur Muhammad
Kalhora Daulatpur.

of the 16th June 1913 that he has secured agreements
in the case of the marginally noted monuments
declared "Protected" in his district.

In the case of the marginally noted monuments at Tatta, Karachi

Jami Masjid.
Jam Nizamud-Din's tomb,
Baradari.

Nawab Amir Khalil Khan's
tomb.

Nawab Isa Khan's tomb.

Nawab Sharfa Khan's tomb.

Tughrai Beg's tomb.

Mirza Jami Beg's tomb.

Nawab Isa Khan's Zanana
tomb.

Mieza Isa Khan's tomb.

District, already declared "Protected," the Collector in
his letter No. 5141 of 9th August 1913 reported to
this office that the owners of these monuments have
executed agreements in accordance with Section 3 of
the Ancient Monuments Preservation Act.

The Collector of Dharwar, in his letter No. 8818 of 6-8th December 1913, favoured me with a list of the below mentioned monuments, with the owners of which agreements have been executed in the prescribed form:—

Chandramaulisvara temple at Unkal.

Temples of Banassankari and Sankaraling, Amargol.

Temple of Basvanna at Tambur.

Temple of Somesvara at Haralhalli.

Temple of Galagesvara at Galagnath.

Temple of Siddhesvara, Haveri.

Temple of Tarakesvara.

Old Jain temple in Fort.

Old ruined temple between the Fort and tank

Temples of Kalamesvara and Ramesvara at Balambid.

Temple of Sarvesvara at Naregal.

Temple of Kadambesvara at Rattihalli.

Temples of Sarasvati and Somesvara at Gadag.

Temples of Kasivisvesvara, Nannesvara, Naganath, Manikesvara, Kumbhargiri, the Jain
Basti and Maskin Bhavi at Lakkundi.

Temples of Doddabasappa and Somesvara, Dambal.

Temple of Amritesvara at Annigiri.

Temple of Muktesvara at Chavdanpur.

} at Hangal.

The Collector of Kanara reports that the owners of the marginally noted monuments at Bhatkal have executed agreements

Ketpai Narayan Devasthan.
Santappa Nayak Tirumalla
Devasthan.

Narasinha Devasthan.

Raghunath Devasthan.

Parasvata Basti.

Santesvara Basti.

Chandranath Dev Basti
Hadvali.

as per his No. 647 of 9th February 1914 to the
address of the Commissioner, and further informs that
in the case of the following monuments, *viz.*:—
European graves 6 miles from Karwar across the
Kalinadi, at Chitkule; inscriptions in the Madhu-
kesvara temple at Banavasi; King's (stone) Seat at
Sonda; Fort and inscription stones at Mirjan; carved
stones near the temple of Gramdeva at Hosur; inscrip-

tions at the temple of Markandesvara at Bailur and at Bhatkal, no agreement
is required as these monuments are ownerless.

By Govt. Res. No. 3645, General Dept., of the 10th May 1913 the Collector
of Nasik was authorized to execute agreements in the case of monuments -

(1) Gondeswar temple of Mahadev at Sinnar;

(2) Temple of Ayeshwar at Sinner;

(3) Caves at Ankai, Taluka Yeola; and

(4) The Hemadpanti temple of Mahadev at Jhodga, Taluka Malegaon,
and the action taken by him was approved as per Government
Resolution No. 455 of 19th January 1914.

The Collector of Broach in his letter No. 2932 of the 6th September
1913 reported to Government that an agreement had been executed with the
manager of the Juma Masjid, Broach, and his action was approved by Govern-
ment as per Government Resolution, General Department, No. 7371 of the
14th October 1913.

APPENDIX L.

Statement of Expenditure on Conservation Works carried out in the Bombay Presidency during the year 1913-1914.

Northern Division.

District.	Taluka.	Place.	Name of monument.	Amount of estimate.	Actual expenditure during the year 1913-1914.	Description of repairs done.	Remarks.
				Rs. a. p.	Rs. a. p.		
Presidency	Panvel	Gharapuri	Elephanta Caves	2,010 0 0	2,019 0 3	Maintenance of and repairs to caves, piers, etc.	Completed.
"	"	"	"	86 0 0	86 0 0	Current repairs to custodian's quarters.	"
"	"	"	"	12 0 0	11 0 0	Current repairs to Assistant Custodian's quarters.	"
"	"	"	"	11 0 0	11 0 0	Current repairs to Police Chalki and watchman's quarters.	"
Thana	Bassein	Bassein	Portuguese Fort and ruins.	7,494 0 0	1,489 6 19	Removing vegetation and repairs to masonry of churches.	In progress
"	"	"	Portuguese Remains in the Fort.	100 0 0	99 15 0	Removing jungle and shrubs and levelling up the ground.	Completed.
"	Salsette	Kondivie	Caves	20 0 0	19 8 0	Pointing and clearing compound and roads.	"
"	"	Thana	Old graves of two Chiefs of Salsette in the English Church.	10 0 0	10 0 0	Clearing the inscription.	"
"	Kalyan	Ambernath	Temple of Ambarnath	5,498 0 8	698 3 3	Materials are purchased and prepared to erect.	In progress
"	Andheri	Kamheri	Caves	244 0 0	187 0 0	Purchased materials for pointing with stone liquid.	"
Kolaba	Mahal	Pal	Caves	60 0 0	59 15 3	Repairs to road, clearing gutters, tanks and caves and numbering caves.	Completed.
"	Mangron	Kuda	Caves	40 0 0	40 0 0	Repairs to approach road, clearing caves and numbering them.	"
"	Karjat	Amhiwli	Caves	30 0 0	23 8 0	Current repairs	"
Borach	Borach	Borach	Dutch tombs	35 0 0	30 0 0	Annual repairs	"
"	"	"	Jami Masjid	63 0 0	63 0 0	Shrubs and plants removed and the compound cleared.	"
Serot	Olpad	Hajira	Vaux's tomb	25 0 0	25 0 0	Annual repairs	"
Ahmedabad	Daskroi	Ahmedabad	Archaeological buildings	350 0 0	335 3 7	Pay of the caretaker	"
"	"	"	"				
"	Sanand	Sarkhej	Archaeological buildings	965 0 0	846 2 0	Removal of rank vegetation and petty repairs such as filling of cracks, etc.	"
"	Dholka	Dholka	"				
"	Virangam	Virangam	"				
Panch Maha's	Halol	Champanir	Archaeological buildings	473 0 0	183 6 9	Surveying the city of Champanir with its monuments.	The survey was partial done and is in progress.
"	"	"	Jami Masjid	106 0 0	96 0 0	Pay of the caretaker	Completed.
"	"	"	"	70 0 0	60 5 6	Minor repairs	"
"	"	"	Nagina Masjid	35 0 0	34 5 6	"	"

Northern Division—continued.

District.	Taluka.	Place.	Name of monument.	Amount of estimate.	Actual expenditure during the year 1913-1914.	Description of repairs done.	Remarks.
				Rs. a. p.	Rs. a. p.		
Panch Mahals	Halol	Champanir	Kevda Masjid	25 0 0	25 0 0	Minor repairs	Completed.
"	"	"	Shikandar Shah's Rauza	120 0 0	119 12 0	"	"
Kaira	Mehmadabad	Sejoli	Mubarak Sayyad's tomb	1,340 0 0	843 2 11	Shrubs, grasses, vegetation, &c., are cleared off the compound levelled and some pointing done. The fallen compound wall has been rebuilt and floorings have been renewed with chaman and cement.	In progress.
*Thana	Umbargaoon	Umbargaoon	Old Fort	.....	95 1 0	Demolishing the remains of the old Fort.	Completed.

Central Division.

Poona	Maual	Karli	Caves	550 0 0	546 11 1	Caretaker's pay and ordinary repairs	Completed.
"	"	Bhaja	Caves	100 0 0	100 0 0	Current repairs	"
"	"	Beda	Caves	100 0 0	97 0 0	Current repairs	"
"	"	Lohgad	Fort	215 0 0	25 12 0	Providing an iron gate to the Fort.	"
Ahmednagar	Ahmednagar	Ahmednagar	Fort	300 0 0	243 15 9	Excavation of certain ancient underground structure discovered in the Fort.	"
"	Shrigonda	Pedgaon	Lakshmi-Narayan temple	25 0 0	18 0 0	Current repairs	"
"	Ahmednagar	Ahmednagar	Tomb of Nizam Ahmed Shah.	.....	68 9 5	Current repairs	"
"	Kopergaoon	Kokamthan	Damodar Mahadev temple	.....	22 12 0	Current repairs	"
Nasik	Nasik	Pathardi	Pandh Lena caves	5,120 0 0	2,373 0 0	Drain and drain walls completed.	In progress.
"	Sinnar	Sinnar	Gondeshwar temple	1,290 0 0	1,017 0 0	Cement pointing and making the roof water-tight and other minor items.	"
*Sholapur	Karmala	Karmala	Fort	.....	42 2 0	Current repairs	Completed.
"	"	"	Acvara temple	.....	132 0 0	Special repairs	In progress.
*West dist.	Khan	Shahada	Tawla	.....	101 9 11	Repairs to the domes	Completed.
"	Sakri	Balsana	Old temples	12 0 0	12 0 0	Pay of the caretaker for 1913-1914.	"
East Khandesh	Challegaon	Patan	Mahaveva temple	306 0 0	291 4 5	Roof made water-tight by replacing earth with lime concrete, jungle in and about the temple was removed and scrubs eradicated used. The crumbling stone work was strengthened by cement.	"
"	"	"	"	1,503 0 0	286 5 5	Stone preserving solution was applied to carvings.	In progress.

* Omitted in the Superintending Engineer's list.

Southern Division.

District.	Taluka.	Place.	Name of monument.	Amount of estimate.	Actual expenditure during the year 1913-1914.	Description of repairs done.	Remarks.
				Rs. a. p.	Rs. a. p.		
Satara	Satara	Satara	Old palace on the Hill Fort.	25 0 0	38 0 0	Putting up notice boards near the monuments to warn people not to do any damage to them.	Completed.
"	Malcompeth	Protappad	Afzal Khan's tomb	38 0 0			"
"	Satara	Satara	Hill Fort	308 0 0			"
"	"	"	European Infantry barracks (maja building) on Fort.	269 0 0	272 0 0	Repairs to drains and road dams, clearing side gutters, removing land slips, repairs to roofs, posting gate, wire fencing, parapet, etc. and general maintenance.	"
"	Malcompeth	Malcompeth	Tomb of General Peter Redwick.	7 0 0	7 0 0	Repairs to leakages, turning tiles, chiselling, pointing, removing bamboo matting, oiling doors and windows, replacing fixtures and fastenings, whitewashing repairs together, etc.	"
Kanara	Whole District.	Whole District.	All protected monuments.	680 0 0	3 0 0	Putting up notice boards on all protected monuments.	There was an expenditure of Rs. 330-4-0 on this work to end of March 1913. This will be resumed on receipt of certain information from the Collector.
"	Kumbha	Mirjan	Old inscriptions	6 0 0	6 0 0	Clearing the slabs with soap and water, applying castor oil, clearing grass all round and repairing shed.	Completed.
"	Siddapur	Bilgi	Old inscriptions	5 0 0	5 0 0	Clearing jungle and rank vegetation round the stone and applying two coats of Atlas fluid.	"
"	"	Honar	Carved stones near the temple of Gramadeva.	5 0 0	5 0 0	"	"
"	Honar	Nagarastikeri	Inscription	18 0 0	18 0 0	"	"
"	"	Bhadkal	"	11 0 0	11 0 0	Clearing the slabs with soap and water and applying castor oil and clearing grass around.	"
Belgaum	Sampgaon	Degam	Jain temple	72 0 0	72 0 0	Repairing the roofing with chaste composition.	"
Dharwar	Galag	Lakunli	Kavireswara temple	47 0 0	46 0 0	Ordinary annual repairs such as removing rank vegetation, clearing compound, repairing stone pavement and jointing, &c.	Completed.
"	"	"	Namdeva temple	50 0 0	46 0 0		
"	"	Dambal	Doddabasavanna temple	63 0 0	67 0 0		
"	Bankapur	Bankapur	Nagarwara temple	10 0 0	10 0 0		
"	Hubli	Unkal	Four-arched temple	12 0 0	12 0 0		
"	Karajgi	Chavdangur	Muktawara temple	7 0 0	7 0 0	Special repairs, viz. rebuilding cavities and replacing loose stones on the roof in their proper places.	In progress.
"	Haveri	Haveri	Siddhaswara temple	15 0 0	15 0 0		
"	Galag	Dambal	Doddabasavanna temple	422 0 0	65 0 0		

Southern Division—continued.

District.	Taluka.	Place.	Name of monument.	Amount of estimate.	Actual expenditure during the year 1913-1914.	Description of repairs done.	Remarks.
				Rs. a p.	Rs. a p.		
Bijapur	Badami	Badami	Caves	72 0 0	72 0 0	Pay of the caretaker for the caves.	Completed.
"	Hungund	Aihole	Old temples	2,747 0 0	2,195 0 0	Special repairs such as earth work, dry stone compound walls, etc.	In progress. Last year's expenditure was Rs. 1,423.
"	"	Pattadakal	Old temples	5,845 0 0	1,300 0 0	Special repairs such as clearing compound and dry stone masonry.	In progress. Last year's expenditure was Rs. 429.
"	Bijapur	Bijapur	Museum	150 0 0	152 0 0	Current repairs	Completed.
"	"	"	Quarters of the custodian of the museum.	10 0 0	10 0 0	Ordinary repairs	"
"	"	"	Archaeological Buildings in the city.	2,000 0 0	1,597 0 0	Annual current repairs	"
"	"	"	Gol Gumbaz	93 0 0	93 0 0	Clearing the compound and other petty repairs.	"
"	"	"	Jami Masjid	70 0 0	69 0 0	Specifying murens in the compound and other petty repairs.	"
"	"	"	Ibrahim Beata	70 0 0	69 0 0	"	"
"	"	"	Asar Mahal	72 0 0	72 0 0	"	"
"	"	"	"	2,531 0 0	1,536 0 0	Special repairs such as fixing reinforced concrete roof, etc.	In progress.
Ratnagiri	Dapoli	Dabhol	Old Muhammadan mosque	686 0 0	53 0 0	Repairs to plaster and removing shrubs from masonry and treating them with shrubs eradicator.	Outlay to end of last year Rs. 591-6-6 completed.

Indus Right Bank Division.

Karachi	Tata	Makli Hills	(1) Amir Khalil Khan's tomb.	416 0 0	363 10 2	(1) Grouting with cement.	Completed.
			(2) Mirza Isakhan's tomb.			(2) Chumam plaster 1" to 1 1/2" thick and refixing old stones.	
			(3) Jam Nizamuddin's tomb.			(3) Scraping joint, cement grouting and clearing site.	
			(4) Nawab Isakhan's tomb.			(4) Repairing pavement and renewing wire gauze.	
			(5) Surfakhan's tomb			(5) Chumam plaster, repairs to floor with old tiles.	
			(6) Tugral Beg's tomb			(6) Repairing pavement with old stones.	
			(7) Jani Beg's tomb			(7) "	
			(8) Twelve pillared pavilion			(8) Chumam plastering	
			(9) Dabgir Mosque			(9) Grouting compound wall with cement.	

Indus Right Bank Division—continued.

District.	Taluka.	Place.	Name of monument.	Amount of estimate.	Actual expenditure during the year 1913-14.	Description of repairs done.	Remarks.
				Rs. a. p.	Rs. a. p.		
Karachi	Tatta	Makli Hills	Nawab Isakhan's Zenana tomb.	1,102 0 0	581 9 0	Special repairs such as renewing pavement, setting up fallen down stones, capitals, lintels, chisum plaster to some, underpinning tomb, refixing fallen down stone slabs in walls, and concrete under pavement, putting up stone slabs in roof over pillars.	In progress.
"	"	"	Jami Masjid	2,502 0 0	624 10 10	Special repairs such as grouting with cement, renewing tiles, resetting crumbled tiles in dado, refixing inscription slabs, repairs to cracked arches in clerestory windows.	"
"	"	"	Archaeological buildings on Makli Hills.	120 0 0	120 0 0	Pay of the caretaker for tomb.	Completed.
Sekkur	Rohri	Rohri	Satyanja Than	740 0 0	629 8 1	Special repairs such as chisum plastering portions of arches, minars and platforms. Renewing kangura parapet wall, paving of the platform and the tomb and filling up of cracks in the walls.	"
Hyderabad	Hyderabad	Hyderabad	Ghulam Shah Kalhora's tomb.	28 0 0	28 0 0	Special repairs. Roof of main building was mud plastered.	"
"	"	"	"	131 0 0	120 0 0	Ordinary repairs. Floors of 4 turrets and patches lime plastered and jungle cut where necessary. Two notice boards purchased and put up.	"
"	"	"	Ghulam Nahi Kalhora's tomb.	164 0 0	164 0 0	Special repairs	"
"	"	"	"	125 0 0	126 0 0	Ordinary repairs. Fallen portions of enclosure wall renewed, pilasters lime plastered, stone pavement renewed where necessary and jungle cut. Enclosure wall wholly mud plastered.	"
"	"	Miani and Dah.	Monuments	.....	118 9 0	Ordinary annual repairs.	"

Indus Left Bank Division.

Thar and Parkar.	Mirpurkhas	Mirpurkhas	Buddhist Stupa	.....	169 0 0	Maintenance of and pay of the caretaker for.	Completed.
"	"	"	Custodian's quarters	210 0 0	200 0 0	Construction of a Lavali (quarters) for custodian of the Stupa.	"
"	Nargur Parkar.	Elofesar	Old mosque	75 0 0	74 0 0	Resetting fallen marble stones in their original position.	"
"	Mithi	Naokot	Fort	75 0 0	72 0 0	Putting up water spouts to drain off rain water.	"

* Omitted in the Superintending Engineer's list.

APPENDIX M.

A Report on Conservation Works carried out in Central India.

The following list of conservation work carried out at Mandu in the Dhar State, during the year 1913-14 was received both from the Political Agent, Bhopawar and the State Engineer, Dhar.

Name of monument.	Amount of sanctioned estimate.			Actual expenditure during the year 1913-1914.			Description of work done.	Remarks.
	Rs.	A.	P.	Rs.	A.	P.		
Hoshang's Tomb ...	3,386	0	0	272	4	0	(1) Rubble coping was laid on the underpinned masonry wall on south. (2) Refixed missing and bulging face stones of the south compound wall.	Completed.
Hindola Mahal ...	233	0	0	15	5	6	Fixed upon north side the balcony lintel and the wall stones with two gunmetal dowels.	"
Mosque in Sir T. Roe's enclosure.	462	0	0	460	9	11	(1) Built up the missing pillar in the centre and the four arches. (2) Cut down the trees from the roof.	"
Rupmati Pavilion ...	1,113	0	0	708	8	0	(1) Restored the arches in the NE. and SE. corners of the N. Pavilion. (2) In the south chhatra the floor was rendered water-tight. (3) Filled up the crack opening under the south chhatra. (4) Repaired and made water-tight the several gaps of the flat roof of the main building. (5) Underpinned the small gaps in the wall. (6) Filled up the arch in north gallery with dry rubble. (7) Removed dry rubble from the arch facing west on lower terrace.	"
Jami Masjid ...	7,802	0	0	1,654	1	9	(1) Built up top of arches in lower colonnade in dressed trap stone and sloped off above in rough rubble trap. (2) Completed the flooring in South Dalana. (3) Repaired the finials on big domes. (4) Completed the upper half of the buttresses in north Dalan and the upper half of the relieving arch to the second arch from the east. (5) Filled up the scaffolding gaps round the big domes above the prayer chamber. (6) Made a portion of roof water-tight on west.	"

Name of monument.	Amount of sanctioned estimate.	Actual expenditure during the year 1913-1914.	Description of work done.	Remarks.
	Rs. A. P.	Rs. A. P.		
Baz Bahadur's Palace.	1,505 0 0	757 1 6	(1) Built up the NE. corner of the building up to the level of the floor above. (2) Removed rubbish from the NE. corner and sloped off the earthen terrace. (3) Built up two piers in the centre of the west arches of the entrance. (4) Repaired the NW. corner of the room N of the east pavilion. (5) Repaired the west wall gap near the SW. corner. (6) Underpinned the walls at places. (7) Fixed up a water shoot on east to throw off roof rain water.	Completed.
Tower of Victory ...	585 0 0	503 2 7	(1) Faced the portion of the tower on west with ashlar masonry. (2) Removed debris on SE. side of the door. (3) Made the masonry water-tight all round the building.	"
Dharmshala .	1,495 0 0	1,488 6 9	(1) Portion of roof on west rendered water tight. (2) Cleared debris from the remains of the roof. (3) Cleared jungle, sloped the sides levelled and drained the roof, where necessary.	"
Mahammad's Tomb...	655 0 0	89 11 6	Cleared jungle and drained the portion round the tomb.	"
Maliq Mutghi's Mosque.	400 0 0	399 2 0	(1) Built up a square pier in the east Dalan and let in iron rails to support ceiling; also built up pilasters in the same Dalan. (2) Replaced broken portions of stones of arches under the NS domes. (3) Inserted a new shaft for upper half of the column in the prayer chamber. (4) Built up a pier and supported the slabs of the ceiling with iron rails. (5) Supported the lintels in the portico by inserting angle irons below. (6) Repaired the missing arches of facade. (7) Underpinned gaps in the east wall.	"
Lat Masjid ...	244 0 0	18 0 6	(1) Substituted new stone lintels in north portico and west and north Dalan. (2) Rebuilt SW corner. (3) Cleared the jungle.	"

Name of monument.	Amount of sanctioned estimate.			Actual expenditure during the year 1913-1914.			Description of work done.	Remarks.
	Rs.	A.	P.	Rs.	A.	P.		
Kamal Maula	1,007	0	0	866	7	8	(1) Supported cracked lintels by giving masonry supports in the prayer chamber. (2) Removed the masonry supports and inserted angle irons to support cracked lintels in the entrance. (3) Cleared platform of rubbish and made it symmetrical by building up a rough-rubble masonry wall round the same. (4) Built up two buttresses to the south wall. (5) Cleared jungle.	Completed. " " " " "

In connection with the work of repairs to the monuments at Mandu in the Dhar State, it is a matter of pleasure to note that the work is being carried out very carefully and judiciously under the supervision of Mr. E. R. Aga, State Engineer. Mr. R. B. Deshpande, Overseer, Mandu, who is in direct charge of the work is deserving of much credit for the quality of work carried out during the last 3 years and half.

The Political Agent, Baghelkhand, favoured me with the following note furnished to him by the Rewah Durbar upon the conservation of ancient monuments carried out during the year 1913-14.

"The temples at Amarkantak and the inscriptions at Piwan and Allaghat were visited by an overseer and the buildings at Chandreh were inspected by the State Engineer.

"*Chandreh Buildings.*—There has been no further damage either to the temple or to the other building adjoining it. No attempt was made to clear the building of the vegetation as the root stumps intertwine the stones and any disturbance is likely to bring down parts of it.

"*At Amarkantak.*—The institution of the Mela ensures the clearing and protection of the existing temple annually. There has been no further damage to any of the temples.

"*Piwan Inscriptions.*—Nothing was done on the box covering it nor is anything required to be done. The lock was found open but the lid was intact and there was no damage to the inscription.

"*Allaghat.*—The corrugated iron sheet over the inscription has been blown away. The wood work was found to be rotten. Arrangements are being made to substitute a shed consisting entirely of iron work. This work will be taken up during the year 1914-15. The repairs to the temple of Maharani Ahilya Bai of Indore situated at Amarkantak will also be taken during the year 1914-15. The cost will be borne by the Indore Durbar."

The Resident, Indore, reported that the Indore Durbar, during the year 1913-14, repaired the sides of the main passage to the monolithic temple of Dharmanathesvara, and the steps to the caves with some petty patch work at a cost of Rs. 542-2-3.

The Political Agent, Bhopal, reports that some repairs were carried out to the famous ancient Buddhist Stupa at Sanchi under the instructions and supervision of the Director-General of Archaeology in India.

Bhopal-Sanchi.

The Political Agent, Malwa, Neemuch, reports that no expenditure on conservation of ancient monuments was incurred in Malwa during the year 1913-14.

Malwa.

APPENDIX N.

A Report on Conservation Works in Rajputana.

The returns of expenditure on conservation of ancient monuments during the last official year received from the marginally noted States are blank. It is also stated in the same return that the old Chhatris of the former Rajas and the temples at Chandravati received as usual the attention of the Kotah and Jhalawar Durbars, respectively.

Bundi, Ajmer, Merwara,
Karauli, Alwar, Jodhpur, Bi-
kaner, Serohi, Jaipur Tonk,
Shahpura & Kishengarh.

In the Mewar State the following old forts, *viz.*, Shitorgarh and Kumalgarh received attention of the Udaipur Durbar. The temple of Miran Bai in the Chitorgarh fort and the door of the valley of Chirwa were also repaired by the Maharana of Udaipur.

It is further reported that in the Bharatpur State some good work of repairs has been carried out to Chamasi Khamba at Kaman, Jid Masjid at Brambad and old palace at Ruplias. The following, *viz.*, Great Mosque at Sikanderabad, Bayan Gumbaz, Jhalra Baori, minar in fort and the palace all at Bayan—received the full attention of the Bharatpur Durbar. A conservation note for these works was supplied to the State by the Director-General of Archaeology in India. No details of repairs are noted in the report under reference. As the province, has, however, now been retransferred to this Circle, it is hoped to visit it in the next touring season with a view to seeing what has actually been undertaken and what yet requires to be done, to put the buildings in a satisfactory condition.

APPENDIX O.

Statement showing the Expenditure incurred on the Conservation of ancient monuments in H. H. the Nizam's Dominions during the year 1322 Fasli.

[6th October 1912 to 5th October 1913.]

Name of District.	Name of Work.	Amount of Estimate.			Expenditure during 1322 Fasli (6th October 1912 to 5th October 1913).			REMARKS.
		Rs.	A.	P.	Rs.	A.	P.	
Medhak ...	Repairs to mosque ...	186	1	4	186	1	4	Completed.
Gulburga ...	Repairs to domes of ancient kings.	6,829	0	0	4,705	10	9	"
" ...	Pay of caretakers for domes of ancient kings.	96	0	0	96	0	0	"
Bedar ...	Emergent repairs to Bahmani Madrasa.	271	0	0	270	8	0	"
" ...	Excavating an underground Building.	200	0	0	163	9	0	"
" ...	Repairing tomb of Sultan Ahmed Shah Bahmani at Astoor.	225	0	0	209	4	0	"
" ...	Special repairs to Tiruksh Mahal.	44	1	6	44	1	6	"
Warangal ...	Repairs to thousand pillars temple at Hanam Konda.	3,078	0	0	2,988	13	0	"
" ...	Preserving Kushi Mahal, Warangal.	1,686	0	0	1,526	15	0	"
Aurangabad ...	Repairing Roshan Gate ...	637	0	0	556	4	10	"
" ...	Repairing Baradari at Daulatabad Fort.	20,842	0	0	15,863	9	11	In progress.
" ...	Repairing the Minaret on the Daulatabad Fort.	3,307	0	0	123	11	2	Completed.
" ...	Special repairs to Ellora caves ...	6,329	0	0	611	14	6	"

APPENDIX P.

Inspection Reports.

The Executive Engineer, Nasik, sent me a report of his inspection of the monuments in his District and for particulars of their condition refers to the conservation notes with which he was supplied by this office as the conservation notes in question were drawn up upon his joint inspection with the Assistant Superintendent, Archaeological Survey.

He informs me that he also visited the temples of Anjaneri and regarding these states that, since they are all classed II (b), which means that these monuments are in charge or possession of private bodies or individuals, he therefore does not submit the result of his inspection of these buildings.

The Executive Engineer, East Khandesh, sent me the following inspection report upon the monuments in his District.

Pandawa's Wada at Erandol.

"It was inspected on the 28th February 1914 by me and found it in fairly good condition. An estimate for certain repairs amounting to Rs. 2,023 was approved by the Superintendent of Archaeological Survey, Western Circle, but the repairs to the extent of funds (Rs. 265) allotted were executed in 1912-13. Repairs executed were:—Stone preservative solution was applied to carved stone work which was fast disintegrating. Also stone masonry pillars were constructed to support the cracked stones supporting the Mehrabs in the wing. Nothing was done in 1913-14 for want of funds. An allotment for Rs. 1,758 may be granted when funds can be made available to preserve old masonry. This Wada has been handed over to the Punch at Brandol for maintenance in 1912-13, *vide* G. R., Revenue Department No. 7716 dated, the 16th August 1912, but the Punch appointed to take care of the monument are considered poor and cannot be expected to do the necessary repairs and hence the request."

Changdeva's Temple at Changdev in Edliabad Peta, Taluka Bhusawal.

"It was inspected by me on 14th February 1914. It was found in good repair state. It was repaired in 1912-13 at a cost of Rs. 733 of which a sum of Rs. 500 was contributed by the public. Repairs executed were:—Stone preservative solution was applied to carved stone work. Also iron rails and girders were given underneath the cracked stone slabs supporting the central Mehrab. Compound wall of the yard requires some repairs. No funds were granted for repairs during 1913-14."

The Maheshvar's Temple at Patna in Chalisgaon Taluka.

"It was inspected by me on 26th May 1913. Repairs such as making the roof watertight by replacing earth with lime concrete, removing growth of jungle in and about the building, stopping further appearance by using Scrub's eradicator, strengthening the crumbling stone work by cement, etc., were executed at a cost of Rs. 393 from the Government of India's grant, *vide* G. R. No. A-2889, dated 14th March 1913.

"Further repairs to this temple have been taken in hand and are in progress. An estimate amounting to Rs. 1,203 was submitted for approval to the Superintendent of Archaeological Survey, Western Circle. A sum of Rs. 289 was spent in applying stone preserving solution during the year under report. This temple was visited by Mr. J. A. Page, Assistant Superintendent, Archaeological Survey, Western Circle, accompanied by my Sub-divisional Officer, Chalisgaon, on 22nd October last. The work already executed was approved by him and the estimate above referred to was in accordance with his personal instructions on the spot issued to my Sub-divisional Officer."

The Executive Engineer, Ahmednagar, inspected the monuments in his District and favoured me with the following report:—
Ahmednagar.

"That the register of Archæological buildings has been kept and the result of inspection has been noted therein after the buildings have been inspected. During the last year owing to the press of work I had no time to inspect the buildings which are situated in the District. I have, however, inspected the two such buildings which are situated at Nagar for which I beg to suggest that—

Nizam Ahmedshah's tomb at Nagar.

"The tomb is situated to the north-west corner of the city and is surrounded by cultivated fields on all sides. There is inconvenience therefore in visiting the place especially as there are crops in the fields. The difficulty can be removed by means of a footpath with railing which would cost about Rs. 500. The length of the same is about 2 furlongs. This would involve a recurring charge of Rs. 15 for its maintenance. The following repairs are badly wanted to restore the building to a better condition :—

Renewing plain chunam plaster,
 Restoring architectural chunam plaster,
 Providing 2 sign-boards, etc."

"During the year under report the dome was plastered and the roof was repaired, the ashlar masonry originally painted with whitewash has been cleaned and the whitewash almost entirely removed. It is hoped to completely remove the whitewash stains when another grant is received."

Damdi Masjid.

"The terrace roof is in good condition. The ashlar masonry has been stained with whitewash in the past. This whitewash should be removed as has been done in the case of Nizam Ahmedshah's tomb. The chunam pointing has spoiled the appearance of the building to some extent. Arrangement will be made to remedy the defects if funds are sanctioned. An approach road and sign-boards are necessary in this case also."

The following is a report submitted by the Executive Engineer, Surat, and Broach, upon archæological works inspected by him.
Surat and Broach. in the Districts under his charge:—

"(a) The Dutch tombs at Broach.—During year under report, they were inspected by the Executive Engineer on the 4th December 1913, and occasionally by the Assistant Engineer in charge of the Sub-division. The Superintendent objected to the whitewashing of the tombs and clearing of epitaphs except under expert supervision. The former is objectionable as frequent whitewashing is likely to fill in the relief decorations. His instructions were followed, and as there was possibility of improving matters, the old whitewash coats were scraped off, so as to restore the decorations to a condition as near to the original as possible. These monuments were afterwards lightly colour-washed so as to cover up the old colour patches, the shade used being what may be described as light chocolate or maroon. This particular colour was prepared from "Gera" and lamp-black dissolved in glue and water, and after many trials the preparation could be brought to the tint which some of the unattended portions of small tombs had attained, under natural climatic conditions. It has toned down the work to a natural shade, while on account of its being thin, has at the same time preserved the unequal effects of the weather on the different parts of the monuments. The outlay incurred during the year was Rs. 35.

"(b) Jami Masjid, Broach.—The Masjid was inspected on 4th December 1913 by the Executive Engineer, and occasionally by the Assistant Engineer, Broach. It has been declared protected. Lately an agreement has been made by the Collector, Broach, with the Punch who were

in charge of the building, and it has been handed over to the P. W. D. for its proper care. However, some fakirs yet occupy a portion of the building, and the Collector of Broach is being addressed to see if its use as a sarai or a takia can be stopped. During the year under report, clearing the walls of vegetation was done as a preliminary measure. The plants growing in the joints of the masonry were generally small in size, and they have been bodily removed as far as possible. In two cases, however, they were a little bigger where acid mixture was tried but with little success. It appears that the trunks operated upon, were far too small to be properly treated with acids. The outlay incurred was Rs. 63.

“(c) Tombs in the English, Dutch and American Cemeteries.—During the year under report, these were inspected by the Executive Engineer on 29th March 1914, and by the Sub-divisional Officer occasionally. They are in a satisfactory condition. The foundation of some of the tombs requires attention and an estimate for the work is under preparation. Meyer's stone cement was tried but with little success. A broken piece of marble did not remain stuck fast. When the cemented piece was touched by hand to ascertain the adhesive power, the piece came out.

“(d) Vaux's tomb at the mouth of the river Tapti at Hajira (Surat).—It was inspected by the Executive Engineer on the 8th April 1914, and occasionally by the Sub-divisional Officer. It is in a satisfactory condition. It is a storeyed building, and as the room on the ground floor was found to be used as a godown for stores for the light house, such as oil drums, chimneys, etc., by the Ports Fund Department, the Assistant Collector, in charge Coast Guard Service, Bombay, has been requested to arrange to discontinue such use of the tomb. The total outlay on this work during the year was Rs. 25.

The Executive Engineer, West Khandesh, reports that he inspected the old well at Tavlai when it was under repairs in February 1912, and found it in good order.

The following is the report of inspection of the archaeological monuments in the Thana District by the Executive Engineer, Thana.

“Franciscan Church.—All jungle was further removed around the building, due to the recent heavy monsoon, and in some places an attempt was made to remove certain dangerous roots by means of acids with a favourable result.

“The floor of the nave was further remedied by having a Steam Roller to be worked in this place, and has set advantageously as the monsoons were over, only dry rolling was resorted to, but every possible advantage will be taken in the ensuing monsoon to do the needful, as the Steam Roller is located at Bassein.

“Repairs to fallen masonry were done in certain places to the portico and the north wall of the nave and also to the back wall of the latter, where the statues originally were kept.

“Plastering was made to the top of the main arch in the nave to make it water-tight.

“St. Paul's Church.—The growth of jungle has been kept down around surroundings.

“Masonry filling has been done to the north wall, extending to the top of the high wall as well as in many other places where required.

“All jambs to doors and windows were in a very disorderly and fallen state and were repaired.

“The door steps to the main and side entrance were thoroughly repaired.

“The pulpit which was in a very dilapidated condition was strengthened.

“It may be noted that the end wall of the nave was repaired to restore the positions where the statues were formerly placed.

"Church of Nossa Senhora Davida.—Jungle in places was kept down around surroundings. The church is in fair condition of preservation, but the numerous walls in the nave apparently erected long after the church was constructed and does not appertain to the church, may be removed and the nave kept clear.

"St. Joseph Cathedral.—Jungle around the building was kept down, also the growth inside was removed. Advantage was taken by the Steam Roller to dry roll the floor, and means will be effected by further action in this matter during the ensuing monsoon. The front tower is in a very dilapidated condition, and an attempt was made to fill in some gaping holes, but the tower above requires attention.

"Means will be taken in future to attend to the small vault at the north side adjoining the tower in order to preserve the pointing on the inner dome by grouting the vault above.

"Dominican Church.—The jungle has been greatly cleaned within and without of the building and the Steam Roller was also utilized for dry rolling in the nave, which produced good results.

"Masonry repairs were done to the jambs of the entrances and filling of the broken entrances in many places to the north wall of the nave was completed. The entrances to the tower were thoroughly repaired and gaping holes to the adjoining east corridor were filled in. The entrances to the main large hall were repaired and a large division of the corner walls of the west room were raised, with new masonry, to prevent the dangerous portions of the walls falling.

"Palace of the Captain of Bassein.—All jungle surrounding the buildings were removed outside as well as in the inside. The tops of arches to the east varandah were made watertight and in gaping places masonry was filled in.

"Temple at Ambarnath.—This is an old Temple and is in a very bad state; a revised estimate for its repair is in hand and will be submitted on the lines suggested by the Assistant Superintendent, Archaeological Survey, Western Circle, in his conservation notes, dated 24th April 1913.

"Motabar Khan's Tomb and Kali Masjid on Shenala Tank.—This building is in a fair condition; the up-keep is in hand of the Muhammadan community in Kalyan, and the work is carried out from their private funds.

"Caves at Kondivate. The Caves at Kondivate have been kept in fair order, so far as the clearing out of the jungle growth and the accumulated debris are concerned. An allotment of Rs. 20 was granted and the work of clearing compound, removing jungle growth and painting iron railing was carried out. The caves are on Hills near Kondivate village, on Kurla Vesava Road. The rock of the caves being soft, it is weathering away badly, of some of the caves.

"Old graves of Chiefs at Thana.—These graves are in the compound of the English Church, Thana, and are in fair condition. The annual grant for repairs is Rs. 10 and the work of clearing compound, repairs to tombs, and painting railing was carried out.

"Caves at Kanheri.—The work of coating some of the rock in certain caves was proposed and the material for the purpose bought and will be used this year.

The Executive Engineer, Sholapur, reported "That during the last official year only the Fort at Sholapur was inspected by me and it was found to be in fair order.

Sholapur.

"The vegetation on the walls and bastions requires removal this year as it was not removed last year, and an estimate will be sent soon for the purpose.

"None of the archaeological buildings could be inspected by me during the last year, but I hope to inspect them this year.

The Superintending Engineer, Indus Left Bank Division, favoured me with the following inspection report upon monuments in his Division :—

Eastern Nara.

"(a) Buddhist Stupa at Mirpurkhas.—It is situated at Kahujo Daro about half a mile to the north of Mirpurkhas. It was found buried under an earthen mound by the Superintendent, Archaeological Survey, Western Circle, in January 1910. The Stupa was inspected by Rao Bahadur V. N. Parulekar, Executive Engineer, on 22nd November 1913 and 10th January 1914 and found to be in good condition. During the year under report an expenditure of Rs. 47 was incurred in repairing the Stupa and of Rs. 122 in entertaining caretaker.

"An estimate amounting to Rs. 195 for repairs to and caretaker for the Stupa for the year 1914-15 against Rs. 190 provided in the detailed schedule of requirements is herewith submitted for favour of disposal. As the living at Mirpurkhas has become too dear, it is difficult to get a responsible Chokidar at Rs. 10. Hence provision of a Caretaker at Rs. 11 per mensem has been made in the estimate. During the year under report a Landhi for the caretaker was also built at a cost of Rs. 200.

"(b) Jain Temple at Gori.—It is situated 14 miles north-west from Virawah and 27 due west of Haro, Nagar Parkar Taluka. A Jain temple about 150 feet by 50 feet built of marble. It was built in Samvat 1432 (A. D. 1375-76). It was inspected by Mr. Moujiram Sharma, the Sub-divisional Officer on 14th February 1914, and found to be in the same condition as before. An estimate amounting to Rs. 700 was sanctioned for special repairs to the temple and an allotment of Rs. 400 granted under the G. R. No. A-9649, dated 24th September 1913, but no repairs were carried out and the allotment was surrendered under this office No. 626, dated 5th February 1914 as the Jain community of Nagar Parkar had objected to its repairs pending the decision of the Commissioner in Sind on the subject.

"(c) Jain Temples at Bhodesar.—These are situated 4 miles N.N.W. from Nagar Parkar. The date of erection is not known. These were inspected by Mr. Moujiram Sharma, the Sub-divisional Officer, on 18th February 1914 and found to be in the same condition as before. An estimate amounting to Rs. 75 for repairs to temple No. 1 was sanctioned and allotment of Rs. 75 granted under G. R. No. A-9649, dated 24th September 1913, but it was surrendered under No. 5741, dated 24th October 1913 and repairs not carried out as desired by the Superintendent, Archaeological Survey, in his No. 487, dated 13th May 1913 owing to the Government right to ownership of the temple being disputed by the Jain community.

"(d) Temple at Virawah.—A Jain temple, which is situated at Virawah in the latitude 24° 31' north and longitude 70° 15' east. It is said to have been founded in A. D. 456 by Jaso Parmaro of Barmer. It was inspected by Mr. Moujiram Sharma, the Sub-divisional Officer, on 15th February 1914 and found to be in the same condition as before. This temple is not considered worthwhile conserving by the Superintendent, Archaeological Survey, Western Circle; *vide* his No. 652, dated 22nd August 1912, no repairs were carried out to the temple during the year under report and none are proposed for the present year.

"(e) A Stone Mosque with white marble pillars at Bhodesar.—It is situated 4 miles north-west from Nagar Parkar and according to the Arabic inscription on the building it was built by Aladin in A. D. 1440 under the orders of Mohamad Shah. The mosque was inspected by Mr. Moujiram Sharma, the Sub-divisional Officer, on 19th February 1914 and found damaged by the heavy rains of September 1913.

"The repairs have since been carried out to the mosque to the value of Rs. 74 during the year under report against the estimate of Rs. 75. An estimate amounting to Rs. 70 for repairs, proposed to be carried out during the year 1914-15 is herewith submitted for favour of disposal.

"(f) Fort at Naokot in Mithi Taluka.—This fort was declared to be a protected monument, Class II (a) under the provisions of Section 3 (2) of the Ancient Monuments Preservation Act No. VII of 1904 under Government Notification No. 7444-A, dated 5th November 1912. An estimate amounting to Rs. 279 for repairs to the fort was sanctioned and allotment of Rs. 279 granted for expenditure late during the year, but as the Official year was drawing to a close repairs to the extent of Rs. 72 could only be carried during the year and the balance, Rs. 207, for which estimate is attached will be spent during the year 1914-15 in putting up rain water spouts to the rampart and repairing masonry of bricks for the fort pillars. The work is in progress. The fort was inspected by Mr. Moujiram Sharma, the Sub-divisional Officer, on 27th November 1913 and found to be in good condition.

"(g) Mosque at Chotiari.—It is situated 14 miles east from Sanghar:—A mosque about 30 feet by 15 feet of brick about the same age as the last.

"An estimate amounting to Rs. 193 for special repairs was sanctioned but the work was already carried from the contribution received from the owner and the allotment of Rs. 193 granted under G. R. No. A-9649, dated 21st September 1913 was surrendered under this office No. 5741, dated 24th October 1913.

"The mosque was inspected by Rao Bahadur V. N. Parulekar, Executive Engineer, on 19th February 1914 and found to be in good condition.

"A statement showing expenditure incurred during the year 1913-14 on conservation and restoration, etc., of certain archaeological buildings in the Eastern Nara District is attached.

"(h) Experiment with the composition called Meyer's Stone Cement.—No experiment of Meyer's Stone Cement was made during the year under report. The place selected for making an experiment, viz., Jain temple of Gori is very favourable for conducting the experiment, but unfortunately the repairs had to be postponed and allotment surrendered as stated above in para 2. This disposes of Superintending Engineer, Indus Left Bank Division's No. 1491, dated 29th March 1914.

APPENDIX R.

Regarding the use of a mixture of sulphuric and nitric acids for destroying stumps growing in the masonry of old stone structures, I have received the following reports:—

The Executive Engineer, Eastern Nara District, Sind, reported that "The necessary experiment was made on the 1st June 1913 after cutting a Khabar tree standing on the platform of the Bhodesar temple. The tree was about 2½' in diameter. A hole 1½" in diameter was drilled into by means of an auger to a depth of 1'-3", and the two acids, nitric and sulphuric, were poured into the hole which was plugged tightly on the evening of the 1st May 1913. The plug was removed on the 23rd May 1913 and the hole found empty. On further inspection it was found that the acids had eaten a little portion of the stump downwards when they met with a stone round which the tree appears to have been grown. The acids have caused no further decay in the stump which is as strong as it was on the day the experiment was commenced.

"As it would appear the acids have been wasted on the stone inside the stump, another experiment will be made if considered necessary."

The same Executive Engineer again reported that "The place was again visited on the evening of the 9th September 1913 and it was found that the stump had not rotted as expected but was as strong and green as before. The plugs over the hole in which the acids were put were very tight and on opening them it was found that the holes were made a little deeper but there was no sign of decay. Inside the holes a paste like substance was found.

"It appears that acids cannot have any effect on a Khabar tree as the latter itself is acidic."

The Superintending Engineer, Southern Division, forwarded me the following report submitted to him by the Sub-divisional Officer, Bijapur:—

"The root destroyer composed of a mixture of sulphuric and nitric acids was tried according to instructions in two places. In one place a thick creeper had entwined itself in the wall of a well. The creeper was shorn of all its leaves and branches and the main root exposed, the major portion of which was well inside the masonry. A deep hole was bored in this root horizontally and a pint of the mixture poured in. The result was that half of the mixture was wasted, owing to the violent action which took place. In the second place, the result was better, as an old tumbled down ruin was chosen, and which was covered with a thick creeper as before; the main root was exposed and this was on the top of the ruin. A number of holes were bored vertically down, and two pints of the mixture poured in, but in small quantities at a time.

"Results.—The mixture just after being poured in, seemed to act on the wood and it appeared as if the root would be immediately destroyed, the action was so great. The result, however, is a failure, for, after two months there is no effect beyond the wood being slightly discoloured. The creepers in both cases have sprung up again and are at the present time in full bloom. Great difficulty was experienced in treating the vertical walls as the acid has got to be poured in horizontally and this cannot be done effectively unless some method of syringing could be adopted. But a fair trial was given to this mixture in the second case of the ruin, and has not proved effective.

"This root destroyer may have been found successful elsewhere and the cause of its failure in Bijapur may be due to weak acids. These acids were procured locally, and considering that nitric acid is known to burn a hole in almost any substance it has not in this case, mixed with sulphuric acid, done more than discolour the wood."

The Superintending Engineer, Indus Right Bank Division, informed me that the Executive Engineer, Western Nara, reported to him "that thin stumps in Yarmahamed's tomb at Khudabad were destroyed in 15 days. All the other Executive Engineers who made trials did so on thick stumps and all, without exception, report that the results were practically nil. At the end of five weeks

the greatest result was slight charring of the wood round the auger hole, but this charring was in no case more than $1/16$ " deep. All the stumps experimented on were babul."

The following letter was addressed by Sir N. G. Chandavarkar, Chief Minister of Indore State, to the Resident, Indore, who favoured me with a copy of it. It is as follows:—

"I have the honour to refer to the correspondence ending with my letter No. 1322, dated the 22nd October 1913, regarding the destruction of stumps by means of acids.

"The agricultural expert reports that the results of the experiments are not encouraging as the stumps have become rotten only in parts although the acids were used in the proportion and quantity in the "Magnet." He further says that even if the experiments had proved successful they could not have been of any practical value as the price of the acids is prohibitive. The whole experiment cost him about Rs. 8 while the same stumps, he says, could have been removed in less than Rs. 2 by engaging labourers and we would have got some wood in return."



APPENDIX S.

Works proposed for 1915-1916.

The list of Works it is proposed to be undertaken during the year 1915-1916 is as follows. They are listed in the order of urgency :—

Current Repairs.

Special No.	Name of District.	Locality.	Name of Work.	Amount.
				Rs.
1	Presidency	Gharapuri	Repairs to caves and piers at Elephanta	2,050
2	"	"	" Custodian's quarters	85
3	"	"	" Assistant Custodian's quarters	11
4	"	"	" Police Chowki and Watchman's quarters.	11
5	Ahmedabad	Ahmedabad	Pay of caretakers for archaeological buildings.	360
6	Kaira and Panch Mahals.	Champanir	" Watchman for Jami Masjid	100
7	Poona	Karli	Maintenance of and repairs to caves	550
8	Nasik	Nasik	" " Panda Lena caves	141
9	West Khandesh.	Balsana	Pay of the caretaker for the old temple	12
10	Bijapur	Badami	" " for the caves	72
11	Karachi Build-ings.	Hyderabad	" " for the tomb of Ghulam Shah Kalhora.	42
12	"	"	" " for the tomb of Ghulam Nabi Kalhora.	42
13	"	Tatta	" " for the tombs on Makli Hills.	120
14	Eastern Nara	Mirpurkhas	Repairs to and pay of the caretaker for the Stupa.	190
15	Thana	Bassein	" Portuguese remains in the Fort.	100
16	Ahmedabad	Ahmedabad	" archaeological buildings at, and in the district.	1,000
17	Bijapur	Bijapur	" archaeological buildings	2,000
18	Karachi Build-ings.	Tatta	" tombs on Makli Hills	600
19	Kaira and Panch Mahals.	Champanir	Repairs to Jatni, Nagina and Kevda masjids.	155
20	Karachi	Hyderabad	" the tomb of Ghulam Shah Kalhora	131
21	"	"	" the tomb of Ghulam Nabi Kalhora.	125
22	Poona	Bhaja	Repairs to caves	100
23	"	Bedsa	" "	100
24	Nasik	Ankai	" "	100
25	Dharwar	Unkal	" four-porched temple	12
26	"	Chavdanpur	" Muktesvara temple	7
27	"	Haveri	" Siddhesvara temple	15
28	"	Dambal	" Doddabasavanna temple	69
29	"	Lakundi	" Kasivisvesvara temple	47
30	"	"	" Namesvara temple	50
31	Broach	Broach	" Dutch tombs	35
32	Surat	Olpad	" Vaux's tomb	25
33	Poona	Junnar	" Caves	400
34	Belgaum	Saundatti	" Inscriptions	10
35	Karachi Build-ings.	Khudabad	" Jami Masjid	70
36	Poona	Shelarvadi	" caves	20
37	Ahmednagar	Kokamthan	" old temple	60
38	Kolaba	Raigarh	" Shivaji's tomb and Mahadev's temple.	70
39	Bijapur	Bijapur	Grant to Nagarkhana Museum	236
Total				9,323

Special Repairs.

Serial No.	Name of District.	Locality.	Name of Work.	Amount.
				Rs.
40	Thana	Bassein	Portuguese remains in the Fort	2,400
41	"	Ambarnath	Temple of Ambarnath	2,000
42	Nasik	Sinnar	Gondeshwar	1,000
43	Karachi Build-ings.	Tatta	Isa Khan's Zenana tomb at	520
44	"	"	Jami Masjid	1,877
45	Bijapur	Aihole	Temples	1,500
46	"	Pattadkal	"	1,000
47	Nasik	Nasik	Pandu Lena caves	220
48	Central Hydera- bad Canals Dist.	Gidu Bandar	Erection of Memorial pillar on site of old Residency.	4,655
49	Dharwar	Dambal	Dodda Basavanna temple	1,100
50	Poona	Karli	Caves	116
51	Bijapur	Bijapur	Asar Mahal	1,986
52	Kaira	Champanir	Archaeological buildings	2,303
Total				20,677
Grant Total				30,000





PART II (a).

Original Research.

Bhilsā, or Bhelsā as it is popularly called, is the head-quarters of the district and taluka of the same name and is a station of the Midland section of the Great Indian Peninsula Railway. A short account of the antiquities of this place will be found in Cunningham's *Archæological Survey of India Report*, Vol. X, pp. 34-36, and also in the *Gwalior State Gazetteer*, Vol. I, pp. 203-7. It is situated on the east bank of the Betwā river.

2. The traditions, that have been associated with Bhilsā, have been narrated by Cunningham, and there is nothing new to add to it. The old name of the place was Bhāillasvāmin. A copper-plate grant, dated V. E. 1190—A. D. 1134 represents a Chandella prince, Madanavarman, to have made a grant of land while residing at Bhāillasvāmin. A stone inscription (A. D. 1173) in the temple of Udayeśvara at Udaipur in the Bhilsā district, which will be described later on, speaks of Udaipur as being situated in the Bhāillasvāmi-mahādvādaśaka, i.e., a group of twelve villages of which Bhāillasvāmin was the principal one. There was a fragmentary inscription originally discovered in the Bhilsā town wall, but now no longer traceable, which, according to Dr. Hall, recorded the erection, by Vāchaspati, minister of Rājā Krishna, of a temple to the Sun under the appellation of Bhāilleśa on the Vetravatī (Betwā) river. This shows that the town had received its name after this god.

3. The object of antiquarian interest that deserves to be mentioned first is a Masjid on the outskirts of the town near the Beshgate. It is also called Bijā Mandir. It was originally a Hindu temple, said to have been built by Bijā or Vijayā, daughter of a Baniyā, but afterwards dismantled and converted into a mosque by Aurangzeb. I am not aware of any evidence in support of these assertions. The style of the building, however, points to its being converted during the early part of the Muhammadan rule. It stands on a much higher level than the surrounding level and most probably represents the ground level of the original temple. It is divided into two chambers—that on the north being intended for a zenana gallery. The other, which is a public prayer hall, has three rows of twelve pillars each with a corresponding row of pilasters touching its walls. There are no less than five inscriptions here, all engraved in the Devanāgarī character. Of these no less than four have been incised on pillars. One of them contains twenty-six lines, and is the longest of the whole lot (Inscription No. 2631). It begins with a panegyric of a goddess called Chachikā or Charchikā, in which we are told that the lord of Dhārā became master of the earth through her favour and that when properly worshipped she conferred upon her devotee the supernatural power of flying in the sky. We are then told that Charchikā was a favourite goddess of Naravarmadeva *alias* Nirvāṇa-Nārāyaṇa, and that it was she who made the king fit for the work. The inscription then ends with telling us that it was the composition of one Thakkura Śrī-Mādhava, son of Sūpaṭa and Jāsa. He is said to be a *dvija*, and belonged to the Māthura race. The record unfortunately is not dated, but the mention of Naravarmadeva, who can be no other than the Paramāra prince of that name, shows that it was inscribed sometime between A. D. 1104-33. The inscription, therefore, leaves no doubt as to the pillar on which it is incised as having belonged to a temple of Charchikā. The other inscriptions in Bijā Mandir though they do not refer to this temple, do not, at any rate, speak of any other temple. And the conclusion is highly probable that the present Bijā Mandir represents the old fane of Charchikā, which seems to have been constructed by Naravarman. The style of the pillars and sculptures found here are of the same age, *viz.*, the 12th century. The other inscriptions on pillars contain names of pilgrims. One of these is Devapati, son of Śādhu Śādhalā. Another is *Mahā-mahātama* Devarāja of the Soḍhā lineage. Soḍhā is a well-known clan of the Paramāras. Soḍhā Rajpūts, however, are now-a-days found on the boundaries of the Jodhpur State and Sind. A third inscription has the date *Saṃvat 1216 Pausa vadi 10*. There is also a fourth inscription engraved

on an old temple basement to be seen from the zenana gallery of the prayer-chamber on the north side (Inscription No. 2630). It consists of a *Śārdāla-vikrīḍita* stanza, which specifies the maximum ages of the various classes of quadrupeds in accordance with the estimate of Sarvadevakṛitin. Thus normally an elephant and a *lāvaka* live each up to 120 years, a horse 32, an ass and a camel each 25, a cow and a buffalo each 26, a ram, a goat and a deer each 16, and a dog 12 only.

4. On the Lohāngī rock which is near the railway station and which overlooks the town of Bhilsā are several buildings, all Muhammadan in character except one. This last is a bell-capital of the Śunga period (Photo. No. 3966). As the hole, into which the pillar shaft was originally pushed, has been turned upwards, the people consider that it originally served the purpose of a trough, from which, according to the local traditions, the celebrated horse of Rukmān-gada drank water. The shaft of the pillar to which the bell-capital belonged, must have been a gigantic one, but has not been yet traced. Of the buildings of the Muhammadan period one is a mosque, one a tomb to Lohāngī *pir*, after whom the rock is named, and one apparently a *Tah-Khanah*. This last is a subterranean chamber for use in hot seasons supported on pillars originally belonging to a Hindu or Jaina temple. The mosque contains no less than six inscriptions, of which all but one are extracts from Al-Quran (Inscriptions Nos. 2625-2629). The one remaining records the erection of the mosque by Saif-al Mulk Khujaudi during the reign of 'Alā-ud-Dunyawād-Dīn Abul Muzzaffar Mahmūd Shāh Khaljī in the year 862 A. H. (Inscription No. 2624). This latter can be no other than Mahmūd Khaljī I, Sultan of Mālwa.

5. The only other building that deserves mention is a tomb in the town of Bhilsā called *Ghumbaz Ka Makbarā* and containing graves of the two brothers Malik-ush Sharf and Malik-ul-tajjar, jewellers of Delhi, who were murdered here by dacoits. It is overgrown with rank vegetation, and is now in a dilapidated condition. It was originally an elegant structure consisting of a square chamber with four porches in front, one on each side, and surrounded by a dome. It seems desirable that every effort should be made to make it structurally sound.

6. Twenty-four miles north-east of Bhilsā is Gyāraspur, which abounds with ancient remains. There is a *kāvita* often repeated by the people here which gives in an epitome the various modern temples and monuments that are the attractions of Gyāraspur to a present day Hindu. It also explains how the place has come to bear this name. It says that the town was originally established by the gods and that it was so called because the vow of *gyāras* or 11th day was observed. King Rukmān-gada of Vidiśā (Besnagar), who was a staunch devotee of Vishnu, used to observe the *Ekādaśī-vrata* so strictly that not only did he himself observe a thorough fast but insisted upon even infants of his family and his own cattle being kept without food on that day. Once his son-in-law called Śobhana came to Vidiśā to see him. Unluckily for him he came on the 11th day. Hard travelling had already made him ravenously hungry, and yet he was given no food. The result was that he died. But he obtained more than full recompense in the next world. A Brāhmaṇ of Vidiśā, two or three years after this event came to pass; happened, in the course of his peregrinations, to halt for one night at the place where Gyāraspur is situated. As soon as it was pitchy dark, he witnessed a strange phenomenon. Vishnu's angels descended from Vaikuṇṭha, swept the place, and made all *bandobast* for a *durbār*. And soon after, lo! Śobhana himself descended, occupied the throne, and held his court. This was the fruit he obtained by observing the *Ekādaśī* fast even at the cost of his life. Every night he held his *durbār* here, and the place came to be called Śobhanapurī after him. But it became more celebrated by the name of Gyāraspur, because *gyāras* or the 11th was the day which led to his elevation. The founding of the present town, however, is attributed to a Gond chief called Mān, whose capital was Gaḍa Maḍhalā near Jubbulpore. He was suffering from leprosy, and started on pilgrimage to see whether any sacred waters could cure him. He heard of the fame of Gyāraspur and came here. The local

waters effected a complete cure. He was overjoyed, and built three tanks, one of which is known as Madāgan, which is on the south-western outskirts of the town. The other two are on the north-east and are close beside each other, the larger of which is known as *Mān-sarovar*.

7. The old remains of Gyāraspur are considerable and cover a large area. The noteworthy are—(1) Aṭhkambā and (2) the Bājramath, outside the town on the west, (3) Chha-kambā inside the town, and (4) the temple of Mālāde on the peak of the hill to the south of the town. These have all been described by Cunningham and Beglar in the *Archæological Survey of India Reports*, Vol. X, p. 31ff. and Vol. p. 90 and ff. The following notes are intended only to supplement their accounts.

8. The Aṭhkambā or eight pillars are what now remains of an ancient temple (Photo. No. 3967). Four of these belong to the *Sabhāmaṇḍapa* and two to the porch. The remaining two are, strictly speaking, pilasters, and pertain to the *antarāla* or shrine vestibule. Of the shrine nothing excepting the door now remains (Photo. No. 3968). On the dedicatory block of its lintel is Śiva with four hands, the two upper of which are gone and the two lower hold a rosary of beads and a water-pitcher. Below his right knee is Nandī. On his right and left at the ends are Brahmā and Viṣṇu. Between Brahmā and Śiva are five figures, the central of which is Tāṇḍava and the remaining are four of the Saptamātrīs, the other three being sculptured between Śiva and Viṣṇu along with Gaṇapati and a male figure playing on the tabour. I was able to trace only three inscriptions here, which are all engraved on pillars, and are pilgrims' records. The most important of these commences with an obeisance to Kṛṣṇeśvara, who, no doubt, was the god to whom the temple was originally dedicated, and ends with the date *Saṃvat 1039 Chaitra-vadi 15 śani* (Inscription No. 2639). This shows that the construction of the temple cannot possibly be pushed later than A. D. 982, and disproves the view of Dr. Burgess, who tentatively assigns it to the 12th century (*Fergusson's History of Indian and Eastern Architecture* by Burgess and Spiers, Vol. II, p. 55). A view of the pillars, which are typical of this age, will be found in Photo. No. 3969. The temple of what is locally known as Bājra Math, but more correctly perhaps Bajranāth faces the east, and consists of three shrines in a row with a common verandah in front (Photo. No. 3970). The central shrine alone is crowned with a spire of the curvilinear type, and the side ones with roofs formed by low semipyramids rising in tiers and meeting the spire (Photo. No. 3971). Cunningham apparently takes it to be an original and integral temple, but even a superficial examination leaves no doubt as to the whole structure having been rebuilt. The verandah was originally supported on fourteen and not sixteen pillars as Cunningham asserts, and had a balcony on each side and a flight of steps to the east. The two extra pillars which he counted are props put up afterwards to support the architraves above, and did not belong to the original plan of the temple. The door frame of the central shrine is richly decorated (Photo. No. 3972). Immediately over the entrance is a seated image of Sūrya with seven horses below. The door has three jambs on each side. The lower parts of the innermost are carved with Gaṅgā and Yamunā, and the upper split up into three compartments, the central ones projecting. These last are carved with Nāga figures with their bodies interlaced. One of the side bands is floral, and the other sculptured with an undulating line representing a lotus stalk, from which spring full-blown flowers supporting monkeys, elephants and their riders, musicians, and pairs of swans. The central door jamb has a female figure sculptured at the bottom, and, above, is, like the innermost jamb, divided into three bands, the middle one projecting. This last is covered with four figures of Sūrya, one above the other, and the side bands with wavy lines of lotus stems holding female archers in their curves. The outermost jamb of the doorframe contains a female figure below, and its upper portion filled up with deep-cut arabesque. All these upper carvings of the door jambs except the central are carried upwards into the corresponding compartments of the lintel. The middle one of these thus does not correspond with that of the jambs, and is sculptured instead with grifins and *Kirtimukhas*.

9. The doorframes of the north and south shrines are of the same style as that of the central. On the lintel of the former is Balarāma, who is greatly mutilated but who can be recognised by the snake hoods over his head. Over the other lintel the post of honour is held by Siva. The images on both these lintels are repeated in the central door jambs, as in first shrine. In each one of these shrines are figures of Tirthaṅkaras standing against the back wall.

10. In the niches on the exterior walls none but Brahmanical divinities figure. On the north side can be identified Kārtikeya, Sūrya, Siva and Gaṇeśa, on the west or back Ardhanaṛiśvara, Tāṇḍava, Balarāma, Varāha and so forth, and on the south Narasiṃha, Kālī and Sūrya. The *Dikpālas* or Regents of the directions can also be recognised though not in every case placed in the proper directions. This coupled with the fact that the outer carved faces of these walls are of different patterns and somehow fitted one to the other is a clear and unmistakable indication of the temple having been rebuilt. Or it may be that the Jainas brought from elsewhere all materials from old Hindu temples and arranged them promiscuously into the present triple-shrined temple for installing images of their Tirthaṅkaras.

11. Perched on the crest of a hill to the south of the town is the temple of Mālāde. It is no doubt a stupendous structure, and, standing as it does on a huge platform, cut out of the hill sides on the east and south and strengthened by retaining walls of rough blocks of stone, it presents a most majestic sight from a distance below. The temple has been constructed with its back against the rock, whose ledge has been so trimmed as to form the ceiling of the sanctum. It appears as if in this original hollow of the hill there was a divinity which afterwards became so sacred and renowned that a temple to it was found indispensable, but as the divinity could not be moved, its shrine had to be erected with the rock-ledge as its ceiling. This rock has been allowed to remain even in the *pradakṣiṇā* at the north-west corner although it interferes with free circumambulation.

12. The temple faces the east, and is constructed of architectural pieces dating from the 9th to the 12th century (Photo. No. 3973). In front stands a tall open porch resting on four columns of the pot and foliage type of about the 10th century (Photo. No. 3974). Two of these bear records of four pilgrims which are of no particular importance. In the centre of the *Sabhāmaṇḍapa* or hall is a dais with the four hall pillars at the corners. This dais seems to have been dug into by treasure hunters, who have thrown earth round about in the hall itself. Between the hall and the shrine is an *antarāla* supported on the front walls of the shrine and two pillars like those of the hall. The pillars of the hall and the *antarāla* are in a row, and give the *Sabhāmaṇḍapa* an appearance of being divided into a nave and side aisles. These last lead to the *pradakṣiṇā*, which is here provided with two doors, one on each side. A view of the hall pillars and pilasters is furnished by Photo. No. 3976. The shrine appears to have had originally three door-frames, one leading into the other. The lintels and jambs of the two inner have fallen, of which the former may still be seen in the hall. One of these has in the centre a goddess with the lion as her vehicle. The dedicatory block of the outer door lintel also contains a goddess, who here bears a child on her lap. The centre of the band above is occupied by a seated Tirthaṅkara. The outermost jambs do not correspond. In the sanctum is an image of a Tirthaṅkara placed against the back wall. Three or four Jaina images are also to be seen here.

13. On the projecting block of the hall door is a goddess with ten hands and seated on Garuḍa. A left hand holds a discus. Down below on the proper right and left respectively are Gaṅgā and Yamunā, each with an attendant by her side and with a dwarf female in between. The attendant of Gaṅgā holds a parasol over her, and, of Yamunā, a *morchel*. Above Yamunā's attendant is shown a group of five figures resting on a lotus. The central one is nude and seated on what looks like a *lod*. It bears a preaching attitude and holds a *kurchā*. On its proper right are also two nude figures, one standing and the other sitting on knees, but both with hands folded towards it. On the left also

are two figures, both standing. One of these is represented as leaving the place in huff, and the other as pacifying it. On the other jamb also above Gangā's attendant is a similar group. The central figure here also is flanked by two figures on each side, of which one is sitting and the other standing. All of them are nude, and, excepting the central one, bear *kurchās*. The interior of the hall also contains a good many Jaina images, all of which except one are no longer *in situ*. This one is a colossal figure of a standing Jina. As it has been placed merely against the wall without having hold on it, a dry pile of rubble stones has been put up on each side to keep it in position, with a flight of steps inserted into each apparently to enable the devotee to anoint the head of the Jina with pigment and put flowers on it.

14. The exterior of the temple is provided with eight balconies, two in front and three on each side, which originally admitted light into the hall and the circumambulatory passage (Photo. No. 3975). But these have now been closed from inside, some entirely and some partly. All the large niches on the outside walls are empty, and most of the smaller contain images of goddesses. The names of three of these, who are seated, have been engraved on their *vāhanas*, in characters of the 10th century, if not earlier. They are Vahnīśikhā and Tārāpati, of goddesses on the south side, and Himā, of a goddess at the back of the temple. The other goddesses are standing, and have all their heads canopied by cobra hoods.

15. The temple is in a sad state of disrepair. The outside walls have been torn asunder in two or three places. The domical ceiling of the hall and that of the *antrāla* have given way. But the shrine is in the worst condition. The south wall of it, as seen in the *pradakṣiṇā*, has sunk and bulged out, pushing forward with it the inside pilasters and thus leading to the dislodgment of the ceiling slabs which have been dashed against the door and have caused cracks in two or three places.

16. On the southern outskirts of the town is what the people call *Chhakambā* which is a name given conjointly to a *Kirtistambha* and what appears to be the central portion of the hall of a once magnificent temple. The former is also known as a *Jhulā* or *Hindolā* among the people. The lowermost panels of its sides, facing the cardinal points, contain the ten incarnations of Viṣṇu. Of the east pillar the north panel holds both Fish and Tortoise on lotus flowers; the west, Varāha; the south, Narasiṃha shown with flames issuing from his head; and the east, Vāmana. Of the other or west pillar the south panel is occupied by Paraśurāma; the west, Rāma; the east, Balarāma, who has peeled off; and the north, both Buddha standing and Kalkī on horseback. On these pillars rests an architrave, and at each end of it is a *Makara* with tail outside and from whose mouth springs a tiny arch. These arches meet in the centre of the architrave. The apex of each is fronted on the south by a (Vaishṇava) Buddha with four hands, the two lower of which are held in the attitude of *Bhūmisparśa-mudrā*. The *Kirtistambha* is surmounted in the middle by a miniature shrine holding Varāha and Narasiṃha in the panels facing south and north.

17. On the top of the hill immediately on the west of Mān-sarovar are two shrines, which have escaped the notice of both Cunningham and Beglar, and which, though they are now almost wrecks, are worthy of note. Of one of these only the door is preserved with part of the inner core of the roof above. Immediately over the entrance is Garuḍa. The lintel above has been broken up into three bands. The lowermost is beautifully carved with ornamental *Chaitya* windows, the central of which is occupied by an elegant *Linga* resting on a *Piṇḍikā*. The compartment above it is also artistically chiselled. In the centre is a Nāga with three hoods and on either side are a number of lotus buds and stems but only one full-blown lotus whose filaments are shown as being eaten by two swans with slender arched necks and standing in front of each other. The door originally had two jambs on each side, the outer of which has now disappeared from the proper right side. The inner bands are each carved with floral ornamentation with Gaṅgā and Yamunā at the bottom.

18. Twenty-four miles north-east of Gyāraspur is Baro, properly Baloh, which abounds with the ruins of mediæval temples.

Baro.

Baro is now a tiny village on the boundary of the Bhilsā District and of the Gwalior State on this side. But the old place, whatever its name was, extended as far as and included the neighbouring town of Pathārī now under Bhopāl Agency, as is evidenced by the remains. These have been described first by Beglar in *Archæological Survey of India Reports*, Vol. VII, pp. 64 ff. and afterwards by Cunningham, *ibid* Vol. X, pp. 69-76. The ruins were also visited by Mr. Cousens who refers to them in his Progress Report for 1893-94. There are here two distinct villages, *vis.*, Baro and Pathārī. Beglar describes all these ruins as belonging to Pathārī. Cunningham, however, clearly distinguishes between the two places. But Mr. Cousens, who knew of Beglar's account only, puts all these remains like him under Pathārī.

19. As the accounts of both Cunningham and Beglar are exhaustive, very little remains to be added to them. The most celebrated of the Baro ruins is the temple of Gaḍarmal, whose shrine contains a composition, nearly life-size, of a newly born babe lying by the side of its mother. They have been surmised to be Māyādevī-Buddha by Beglar, Trisālā-Mahāvira by Cunningham, and Yaśodā-Kṛishṇa by Mr. Cousens. A careful examination of this temple will convince any one that it is built of odd pieces ranging in date from the 8th to the 10th century and evidently brought from different adjoining temples. The image in question in all probability did not originally belong to this temple, which again may not have stood here at all before the heterogenous architectural pieces were conglomerated into the present structure. Now, on the other hand, the inscription engraved on the column of Pathārī opens with an invocation in four verses to the Hindu god Kṛishṇa and tells us that it served the purpose of a Garuḍa-stambha in front of a temple to Kṛishṇa. No traces of the temple have remained, and it is possible that the image now in the shrine of Gaḍarmal temple originally pertained to the Kṛishṇa fane, from which it was removed when it fell into disrepair.

20. Udaypur is a village in the Bāsodā Tahshil of the Bhilsā District, and

Udaypur.

is four miles from the Bareilly railway station and sixteen miles north-west of Baro. It is now an insignificant village, but, in the mediæval Hindu period and during the Muhammadan rule, was a place of some importance, as is evidenced by the monumental remains at present existing. Of the Hindu remains the temple of Nilakanṭheśvara is the most noteworthy. Of special interest among the Muhammadan monuments are a mosque and a mansion both of the Mughal period and enclosed within a fort wall. The old market square with colonnaded sides formed of Hindu pillars, the gates of the fort wall some in Hindu and some in Muhammadan style, and the traces of an old wall constructed of great stone blocks packed dry half a mile south of the village deserve little more than a mere mention.

21. The monuments of Udaypur have been described by Beglar in *Archæological Survey of India Reports*, Vol. VII, pp. 81-88, and by Cunningham, *ibid.*, Vol. X, pp. 65-69. The various legends connecting Udayasimha, the Paramāra king, with the foundation of the town and the building of the temple of Nilakanṭheśvara have already been narrated by them and are consequently not worth reiterating. By far the most important object of antiquarian interest here is the fane of Nilakanṭheśvara, built of a fine red sand stone. It faces the east, and stands upon a small podium in the centre of a courtyard to which access is now obtained through a gate in its south-west corner. It consists of a shrine, a hall, and three porches projecting from the sides of the hall and each approached by a flight of steps, that on the east being the principal entrance. The whole lower portion of each porch is covered except at the entrance opening with a stone screen surmounted by a stone bench provided with a back formed by an inclined dwarf wall. On these benches rest short pillars which support the roof above (Photo. No. 3994). The outer carved faces of these roofs, however, have almost completely disappeared. The eaves slabs also are more or less destroyed. The steps, leading to the eastern principal entrance porch, were originally flanked by two sculptured dwarf walls, very little of which has now survived and which have now to a large extent been replaced by rubble erections.

22. The hall or *Sabhāmandapa* is 24' square leading to an *antarāla*, 12' 9" × 9' 6". The centre is occupied by a Nandī, above which is the domical ceiling. The roof of the hall is supported by walls and eight pillars and four pilasters very heavy but deeply and boldly carved (Photo. No. 3996). The door of the shrine is exquisitely sculptured (Photo. No. 3995). Each side consists of five jambs, the lower portions of which are occupied with statuary. Above, the central jamb which projects is composed of a miniature spiral shaft crowned with a series of circular caps except the lowermost which is of the pot and foliage style. The other jambs are floral except the outermost which is sculptured with a series of horse riders one upon the other. On the dedicatory block of the shrine lintel is Gaṇeśa; above is Śiva. Above still on the frieze is a row of five goddesses. Inside is a stone *līṅga* covered with a brass sheet, which, from the inscription incised on it, appears to have been put up by one Khānderao Appaji in Śaivāt 1841. The outside walls of the shrine and hall are profusely decorated with figures, hardly any of which is intact. Either the nose or the hands have been chipped off, and it is not, therefore, possible to identify the deities. This desecration must no doubt have been caused when the Muhammadans built the mosque, which stands immediately behind this temple.

23. The hall, as described by Fergusson, "is covered with a low pyramidal roof, placed diagonally on the sub-structure, and rising in steps, each of which is ornamented with vases or urns of varying shapes" (Photo. No. 3994). This form of hall roof is met with not only in Rājputānā and Gujarāt, but also in the Dekkan. The spire of the shrine, however, is peculiarly Dekkan in style and is almost identical with that of the temple of Gondeśvar at Sinnar in the Nāsik, and that at Ambarnāth in the Thānā District. The towers of these two last temples, however, are more or less destroyed, and that of Udaypur is the only one of this type that has been wholly and entirely preserved, and as such is of great importance. It is a spire decorated by four bands with thirty-five miniature *śikhara*s between two consecutive bands arranged in five rows, each row holding seven of them placed one above the other (Photo. No. 3993). One noteworthy circumstance connected with the tower of this temple at Udaypur is the carving of a male figure immediately below the *amalāśilā* at the north-west corner. I was not able to ascertain whose figure it was. The man appears to be intended to hold in his hand the lower end of the flag staff, which no doubt was placed here, as clearly indicated by a round aperture in the *amalāśilā* just above the figure. The superb dress and the profusion of ornaments point to his high rank, and it is possible that we have in him a sculpture of the Paramāra Udayāditya himself, who constructed the temple. The only other instance of such a figure that I have found is furnished by the Taleśvar temple at Tilasmā in Mewār, where the figure was supposed to be that of a royal personage, who built it and ascended to heaven by this meritorious act.

24. In front of the temple is a structure called *Vedī*, which is said to have been used by Udayāditya for the performance of a sacrifice after building the temple. It is a square chamber enclosed with walls of beautiful perforated stone work with a projection in the middle of each (Photo. No. 3997). This work is broken away in places, and the gaps thus caused have been filled up with rubble. The present entrance is through a doorway in the west wall, but there was another in the opposite wall, which has now been closed with rubble. Near the present entrance is a large *Pippal* tree, which has struck roots both into the perforated work and the wall joints. The interior is unclean and is used as a cattle-shed, which is a great pity. The exterior is silted up with debris, which also is undesirable. The roof is flat and is now in a dilapidated condition.

25. Behind the temple and touching the western extremity of the courtyard, a mosque has been constructed out of materials from old Hindu temples. Beglar's description of this mosque is slightly inaccurate. The flat roof of the hall is supported not by four (as he says), but five, rows of Hindu pillars. There are again not twelve but eight pillars in each row, including the dwarf ones. Cunningham thinks that there stood here the north-west corner attend-

ant shrine and the western *Vedi* which were knocked down, and this *Masjid* was erected in their place. Of course, there is every probability that a subsidiary shrine was existing here, but the examination of the materials of the mosque does not support the conclusion that there was another *Vedi* here. The back of this building clearly indicates that the larger portion of this material belonged to a temple which had porches similar to those of the present one (Photo. No. 3999).

26. In front of the mosque there are two archways one on each side of the back of the temple, apparently unfinished and bearing Persian inscriptions. They record the erection of a mosque (no doubt the one just referred to) by Ahmad Wajih during the reign of Abul Mujahid Mohammad bin Tughlaq Shah (Sultan of Delhi). While one of them bears the date 737 A. H., the other 739 A. H. This difference is unaccountable except perhaps on the surmise that the building of the *Masjid* commenced in 737 and was completed in 739.

27. The temple of Nilakanthesvara, like that of Gadarmal at Baro, must originally have had six attendant shrines, one at the north and one at the south, and the remaining four at the north-east (Photo No. 3998), south-east, south-west and north-west corners. Of these the two last have completely gone and that at the south all but gone. The rest are more or less preserved.

28. On the walls and pillars of the eastern porch and hall door a number of inscriptions have been incised ranging in age from the 11th to the 16th century. Besides these there are two inscription stone slabs detached from their settings and now lying loose in the porch. It is not clear to which structure they originally pertained. But certain it is that they did not belong to the temple of Nilakanthesvara as there are no niches here wherein they could have been placed. The larger of these slabs contains but a fragment of an inscription setting forth the eulogy of the Paramara dynasty, showing that there was at least one more slab which has now been lost. This fragment has been edited by Bühler in *Epigraphia Indica*, Vol. I., p. 233 ff. and carries the dynastic list up to Udayaditya. The second slab, which is somewhat smaller, has its inscription published by F. Kielhorn in the *Indian Antiquary*, Vol. XVIII, pp. 347-8. From this inscription it appears that the slab originally belonged to a temple of Vaidyanatha, and it is not impossible that the first slab also was connected with it. The temple appears to have been of some importance as is clear from the inscription. And it seems tempting to suppose, though, of course, there is no strong evidence in support of it, that it was in the vicinity of Nilakanthesvara and that it was this Hindu fane that was demolished and served as materials for constructing the mosque behind Nilakanthesvara during the reign of Mohammad Tughlaq.

29. Of the other inscriptions in the porch of Nilakanthesvara, the important ones have been either published or summarised by Kielhorn. One of these credits Udayaditya with having established Udayapura, Udayesvara and Udayasamudra. The first of these is the village of Udaypur, the second the temple of Nilakanthesvara itself. It is not possible to identify Udayasamudra, though from the name it is evident that it refers to a tank or lake. As this is a contemporary record, the above statement is worthy of credence. Another inscription, which is, however, much later than the time of Udayaditya and is written in the vernacular of the day, informs us that the construction of Udayesvara (Nilakanthesvara) commenced in V. S. 1116 (=1059 A. D.); and a third inscription which is of the time of the Paramara prince tells us that the flagstaff of the temple was erected in *Saivrat 1137 Vaisākha sudi 7*, corresponding to A. D. 1080. The god Udayesvara has also been called Udalesvara in other inscriptions, which enumerate various grants made to him at different times.

30. Another object of some archaeological importance at Udaypur, as stated above, is a mosque of the Mughal style which stands in an area enclosed by a fort wall on the southern outskirts of the village (Photo. No. 3992). An inscription on the outer face of the northern wall records the erection of this *Masjid* in the town of Udaipur, District Chanderi, in the province of Malwa,

begun by Qāzi Auliya, son of Sayyid Alid-uṣ-ṣamad during the reign of the emperor Jahāngīr and completed after his death by his two sons Sayyid Hāmid and Sayyid Dāud in the reign of the emperor, Shāh Jahān in the year 1041 (A. H.). In front of the Masjid are several tombs, the principal among which are said to be those of the father and uncle of the finishers. At present it is in charge of the local Qazi who claims to be a descendant of the original builders. As it is still used as a place of worship, the interior has been kept nice and clean. The building also is, on the whole, in safe condition except a portion of masonry near the north-east corner which has separated itself from the main structure and slightly buckled forward. The small ornamental minarets also at the four corners of the roof are leaning one way or the other.

31. The palatial building situated a few yards behind this Masjid is said to have been the private residence of the builder. The present owner of this building, as in the case of the *masjid*, is the local Qazi. This is a spacious structure in the Mughal style consisting of a number of fine rooms decorated with arabesque and *jali* work of varying and beautiful design. The place, however, is now deserted and was so thickly overgrown with jungle when I visited Udaypur that it was not possible to examine the building thoroughly.

PART II (b).

Excavation at Besnagar.

32. The column called Khām Bābā and the ground round about it referred to in para. 18 on p. 4 *supra*, are the property of a Pujārī named Pratāp-purī Gosāl popularly known as Bābājee, who holds it as an *inām* from the Gwalior Durbar. The pillar itself is in the close vicinity and near the north-east corner of an artificial mound, on the northern end of which is perched the squalid dwelling of the Bābājee. In front, *i.e.*, on the east of the mound, runs a country track. Still farther east, the ground was fairly even though it rose a little towards its north-east and sloped off towards its south-east end. That on the north and south of the mound was very nearly of the same level. At the back, however, it sloped off considerably towards the west. Excavation was first started at the two places previously exposed by Mr. Lake, Superintending Engineer of the Gwalior State,* *viz.*, in the immediate south of the Pujārī's house (called Trench C), and about 100 feet to its south-east (called Trench A). After exposing parts of railings he filled the trenches, I was told, at the request of the Pujārī, who, on account of his cattle, was anxious to see them filled and restored to their original condition. These trenches I had, therefore, to re-open, but at right angles to these I sunk two cross trenches, called B and D. In Trench A traces of two different kinds of railings were found. They may be distinguished as (1) the open, and (2) the solid, railing. The first is of the well-known type, the most notable specimen of it being furnished by the Sāñchi remains. Here, however, it is of the plainest kind, and neither are the pillars bevelled nor the cross-bars decorated with medallions as at Sāñchi. Only two of the pillars of this railing are approximately in position, and the rest have fallen down. The railing originally ran from east to west, but it could be traced only over a length of about 51' 6". At the west end it meets the other railing, but on the east it must have run to a considerable distance, although not a vestige of it is now visible. This is intelligible enough as the soil on this side is of a lower level than even the original ground of this railing. The other railing which is contiguous with it was not at first recognised to be such, as it presented in appearance an altogether unknown variety. What here was brought to light was a continuous line of stone slabs with fragment of partition screen between them, the meaning of which, however, was far from clear when it was unearthed. It was not till a trench on the north side of Bābājee's house was sunk, and better preserved parts of this type of railing exposed that it was possible to recognise the existence of a similar one in Trench A also. The traces of this railing, however, could be detected only up to 28 feet approximately. Trench B, which crossed Trench A, was comparatively abortive, though, in point of minor antiquities, such as coins, toys and so on, it proved by no means

* An account of his excavations is contained in the *Journal of the Bombay Branch of the Royal Asiatic Society*, Vol. XXIII, p. 135 and ff.

inferior to the latter. In the southern part of this trench were discovered the remains of a brick and stone walling, which no doubt originally formed part of dwelling. In the northern part of it, also, similar remnants were visible though very few as compared with the former. Traces of habitation were not confined to Trench B only. On the north of Trench A also, just where the second or solid railing broke off, was exhumed a similar brick walling, with a water-channel close beside it. Not far from it was found a *hauj* or cistern, the sides of which appear to have been badly knocked off when Mr. Lake excavated here. The *hauj* seems originally to have been a square, with each side measuring not less than 11' 6". The surface seems to be constructed of mortar laid on a solid bedding of brick-bats intermixed with tiny boulders.

33. In Trench C which was cut immediately on the south of Bābājee's house, no less than eight pillars and one coping stone of an open railing were discovered. This was the second of the two trenches, which Mr. Lake had dug on this site. He concluded from this find that a railing had stood here, running from east to west. But a little reflection will convince any one that there was no railing here. In the first place, in the case of open railings which have fallen the pillars have always dropped down either on one side or the other of the line in which they ran. In the present case, all the pillars have fallen in the direction of the line in which they have been supposed by Mr. Lake to have run. Secondly, though here no less than eight pillars were found, there was but one coping piece discovered, and there was not a trace of any cross-bar, foundation slab or foundation layers. The absence of these last two is highly significant. From these and other reasons which cannot be detailed here the conclusion is irresistible that there existed no railing here and that the pillars had but been stacked at this place.

34. Trench D which was cut at right angles to Trench C was more fruitful and revealed the remains of the foundation walling of an old dwelling and of a brick wall in front. Very little in its line of alignment has survived, but this much is clear that it was approached from the north by a flight of three steps, which led to an antechamber floored with cement. I have no doubt that this was a dwelling of great importance as here bricks, pottery and nails were found in far larger numbers than in any other trench on this side. And this conclusion was confirmed by clearing the ground on its west, which yielded one stone mortar and two *haujas*. Of the latter one is of the same level as, and the other of lower level than, the original ground here. The first of these again is more strongly built than the other. This shows that it was used as a cistern and the second most probably for storing grain.

35. A fifth trench (Trench E) was commenced from the north-east corner of the compound enclosing Bābājee's ground. The ground here was more rising than elsewhere. Besides, I was assured by Bābājee that his ploughshare, whenever it was employed, struck against large stones on this side of his field. Every thing thus seemed promising. And excavations here led to the discovery of another open railing corresponding to that found in Trench A, and running like it from east to west. Traces of this railing were found over a distance of 220 feet in a line till its western end met the solid railing unearthed on the north of Bābājee's house. Where its eastern end was could not be ascertained. Fourteen pillars are *in situ* or, at any rate, very nearly so. Six have fallen near their foundation slabs, and the rest have disappeared. All these except one were preserved only up to their lowermost socket holes, the upper portions being destroyed. Immediately on the north side of this railing were found remnants of a fairly large structure, whose stone walling extended over a length of 90 feet. Remains of its inside brick walling were also brought to light. The full plan and the purpose of this structure are far from clear.

36. *Pari passu* with Trench E we sunk two more trenches one immediately behind Bābājee's house (Trench F), and the other immediately on the north (Trench G). We began excavating the last from its western end and at first lighted upon only thin long foundation slabs running in a line, the significance of which was at first quite beyond our comprehension. On tracing this line over a distance of 74 feet, however, we came upon its superstructure, and concluded that originally it constituted a railing. This railing is quite unique in design,

and, so far as my knowledge goes, has not yet been discovered by any archaeologist in India. In contradistinction to the open railing such as is typically represented by that which, *e.g.*, surrounds Tope 1 at Sāñchi, and to such as was found in Trenches A and E at Khām Bābā also, the new one may be called the solid railing. The pillar of the latter is of comparatively small section. Its sides have no socket-holes to receive cross-bars as in the case of open railing, but are each cut into chases almost for the whole length exposed above ground. Into the chases of these pillars were fitted screens or panels. The upper portions of the pillars have broken off, and it is not therefore possible to determine the exact height of the railing. Of the broken pillars the highest was only 3' 6" above ground. Between this new railing and Bābājee's house another pillar was unearthed. Its height measured 6' 8 $\frac{1}{4}$ ", but this pillar also is not whole and entire, as it exhibited the surface of a fracture at either end. But, though it is not possible from the pillars to settle the height of the railing, it is all but certain that its height could not have been less than that of the open railing which it met. The height of the latter was nearly 10 feet above ground, and this may, therefore, be taken to be the height of the new railing also. No coping stone of this railing was found in the trench which revealed it. But one was discovered in the *Chabutrā* or platform round the Khām Bābā column, when one side of it was broken open and a trench sunk in front of it to inspect the nature of its foundations. The whole of its underside is chased, and it, therefore, appears that it rested directly not only upon the pillars but also upon the panels whose upper side was fixed into its chase. This coping stone also is not whole and entire, but as its length is not less than 6' 6" and the intercolumniation of the railing varies from 3' 6" to 4' 4", it seems that, as at Sāñchi, it spanned two intercolumniations. The joint of the pillar which was found between this railing and Bābājee's house, and which has just been adverted to, consists of a central tenon with a side projection and shouldered recess, which indicates that the pillar in question supported not one but two coping beams. The end of one of these rested upon the projection and the end of the other upon the shouldered recess of the top of the pillar, and the two ends being held together by the tenon pushed into the mortices which must have been cut into them to receive it. Near this pillar was found the top piece of another pillar which ended merely in a tenon. This must be the intervening pillar of the railing, on which only one coping stone rested and which came centrally between its ends. A view of this remarkable railing restored from the different fragments found will be shown as accompaniment to my longer and more detailed account of these excavations, which I intend contributing to the *Archæological Annual* of the Director-General of Archæology. The north side of the solid railing which was discovered in Trench G is about 7 feet long and runs very near the north open railing dug out in Trench E. Whether they actually met is somewhat problematical because they do not run in exactly the same line.

37. To settle whether that which we thought to be the western end of the new railing was really so, and, if so, to determine where and how it turned off, we cut three trenches in three different directions. One of these called Trench G₁ showed us that our surmise was correct and that the railing afterwards turned off to the south almost at right angles to the first line. In Trench G₁, however, nothing but the line of foundation slabs was found. There was not a trace of its superstructure. This was, however, not surprising at all, considering that the ground here was of a very low level, lower even than the original ground of this railing. These foundation slabs again could be traced only up to a distance of 28'. The line then suddenly broke off but we continued to push the trench southwards when after a distance of about 64 feet we lighted upon another foundation slab with a second one running at right angles to it. The western side of the solid railing thus extended over a length of 152' after which it turned off to the east, as the second of these two slabs showed. We dug a long narrow trench in the line of the second of the two slabs just referred to, but in vain. But there can be little doubt that the southern line of the solid railing must have commenced from here and continued till it met the lowermost of the steps which gave access to the dwelling whose remains were excavated in Trench D.

38. It has been stated above that when Trenches E and G, which yielded the north open railing and the solid railing respectively, were cut, a third also (Trench F) was sunk immediately behind Bābājee's house. This led to the unearthing of a masonry wall packed dry but very much out of plumb. At both its ends it seemed to turn off towards the east, and so at its north end we cut another trench. This exposed another wall of the same style and condition. A similar attempt was made at the south end, which laid bare a third wall on the south, but we had cleared only about 5' when Bābājee, being apprehensive of the safety of his house, requested us to stop all work on this side. I thought it expedient to accede to his request, and so did not push further the work of clearing the south wall. Thus on three sides of the mound which is surmounted by Bābājee's house, three walls of the same pattern were exhumed, and the conclusion is all but certain that we had here the three retaining walls of a platform. It was rather difficult to find out the fourth wall of this platform, as this involved the demolition of the front part of Bābājee's house. Next year if Bābājee's house is acquired by the Gwalior State every endeavour will be made to unearth this wall.

39. Our attention was now directed to the Khām Bābā column itself. Was it *in situ* or not? This was the question that now troubled us most. On the one hand, the inscription on this pillar, as it stood, was on the same level with the human eye. This led us to think that it was in position. The solid railing, on the other hand, which passed in its close vicinity was on a much lower level than the platform from which the column emerged. Could the column have been put up in its present place at some later period and have had absolutely no connection with the railings exposed? The question was exceedingly tantalizing. It could be answered only by sinking a trench in front of the pillar. But Bābājee was very obdurate, and would not allow us to defile the divinity in this manner. The column is a divinity not only in the eyes of Bābājee but also of the local people from among whom we obtained our supply of labourers. These also refused to work, and the idea of excavating in front of the column seemed for a time completely quashed. We did not, however, stop our negotiations with Bābājee, and we at last succeeded in securing his consent. We had a gang of Bundelkhandi coolies whose minds were not imbued with the local superstition, and these were consequently set to this work. It was not without some difficulty that we could induce them even, for they had hardly commenced work when, as ill-luck would have it, a cobra wriggled out from the platform of the column. The cobra produced a panic among the coolies, who thought that Khām Bābā, being offended at this sacrilegious act, came in that guise to bite and punish the offenders. Two Pathāns from this gang were forthwith ordered to kill it, and the cobra was soon laid lifeless on the ground. This quieted the fears of the coolies, and they resumed work. Fortunately no further circumstances arose to dishearten them, and the work was continued uninterruptedly. And we were delighted to find that the column was *in situ* and very nearly on the same level, and hence connected, with the solid railing.

40. A succinct description of the column as exposed to view above the platform has been given by Dr. Marshall in the *Jour. R. As. Soc.* for 1909. An account of the concealed portion of it, as revealed by this excavation, is therefore, here necessary. The column as it emerged from the platform was known to be an octagon. How far this octagon extended, and whether it changed to some other form down below as it obviously did above, were questions whose answers it was impossible to give. The excavation, however, showed that it continued to be an octagon down to its lower end, which is 8' from the top of the platform. The first length of six feet is well dressed, and the remaining two feet roughly dressed. It is obvious that the dividing line between the rough and fine dressed surfaces must have coincided with the original ground-level of the pillar, and it is worthy of note that even the rough dressed portion of the shaft, which evidently remained underground, is an octagon like that above, which was visible. This is a characteristic of the pillars of the Śunga period and was noticeable even at Sāñchī when some of them were unearthed. Again, the column above the platform gave us an impression that its present rough exterior was due to its being indifferently

dressed originally and consequently it led us to cast a slur on the art of the period. But the buried portion now revealed convinced us that the surface was very finely dressed indeed, though, of course, not to such a degree as to vie with Aśoka's columns and that the present appearance of the upper portion was doubtless caused by the wearing action of weather. The pillar itself rests directly upon a stone slab, and to keep it thoroughly perpendicular and bring its rough irregular lower end in direct contact with the slab a pair of iron chisels and two chips of stone were driven in between. The foundations, which began with this slab extend to a depth of about 3', and consist of stone slabs alternating with layers of broken up laterite murum, black earth, and concrete well rammed down.

41. It was a matter of immense gratification to find that Khām Bābā was in its original position. It is impossible to over-estimate the importance of this discovery. In the first place this convinced us beyond all possibility of doubt that both the varieties of railing and the three retaining walls of the platform were all connected with a definite monument, *viz.*, the temple of Vāsudeva, in whose honour no doubt Heliodorus erected the pillar. Secondly, as we knew the approximate age of the column, by comparing its original ground level with those of other structures we exhumed, it was easy to deduce their relative ages. Thus we know that Khām Bābā was put up *circa* 140 B.C. Now the original ground-level of the solid railing is at least 9" lower than that of the column. This shows that the former is anterior to the latter. How much anterior it is impossible to say, but we shall not be far wide of the mark if we assign this railing to B.C. 165.

42. It will be seen from the account given above that the mound on which Bābājee's house is situated was surrounded on three sides by the solid railing. In the immediate proximity of this mound again stands Khām Bābā, which we now know to be *in situ* and which consequently must have been close beside the temple of Vāsudeva. The conclusion is thus almost certain that the present mound represents the original site of the old temple. As Bābājee's dwelling has been built on it, it was not possible to explore this mound thoroughly and systematically. I was, however, able to prevail upon him to allow us to dig a small trench in the court inside his house. One was accordingly sunk commencing from the north retaining wall of the platform. It was carried to a depth of 15' 4" till the yellow soil was reached. At a depth of about 8' 6" from the surface we came upon a thin floor of old broken tiles, well consolidated, with still thinner layer of yellow earth. Curiously enough it accords almost with the ground-level of the solid railing, and one is tempted to conclude that this was the original ground of the temple, which stood here and with which the railing was connected. But no satisfactory explanation can be adduced to show why no vestige of this structure has survived. It is possible that it was entirely built of wood as no doubt was the case with the ancient edifices of the Maurya period, and that wood being a perishable material no trace of the old temple now remains. But a time came when they perceived the necessity of raising the ground level of the temple, and a terrace was erected for building a new one. What that necessity was will be explained shortly.

43. Two or three other trenches we sunk in the soil on the north of the solid railing. But beyond yielding a few miscellaneous articles, such as coins, toys and so forth they were not very fruitful. An idea occurred to me that though we had dug trenches to the level of the foundation slabs of the solid railing, none had been sunk on this side to any greater depth with a view to see whether any ancient remains were hidden there. One was thus cut close to this railing at the north-west corner. After digging down to about three feet below its foundations we lighted upon a line of bricks, which was on further excavation found to be the top of a brick wall. Nearly sixty-six feet of this wall on its north side were exposed, and I have no doubt that it extended right up to the front of the Khām Bābā, where, in the trench sunk before it three courses exactly similar to those of this wall were detected. The wall ran thus on this side to 160 feet at least. As the season was far advanced and labour became scarce, I was most reluctantly compelled to leave off the work of tracing the line of this wall even up to Khām Bābā and also of seeing whether it

continued farther. This work, therefore, has been reserved for the next season. Of its west side only 15 feet of the wall could be traced when it suddenly broke off. We continued the trench fifteen feet farther but without success. It is just possible that still farther digging in the same direction may bring to light portions of this wall. But as it was too late in the season to persevere, this work too had to be put off till next year. Of the wall so far exposed only twelve courses were found, the topmost, however, containing one brick only. The maximum height of the wall here is 3' 4", but originally it must have been much greater. There seems to have been no definite principle according to which the bricks were laid. Most of them have been placed breadthwise and only a few here and there lengthwise. The only principle that seems to have been observed is that no two joints come immediately one above the other. The wall is only 2' 2" thick. Its interior, again, is not neat and finished as its exterior, face is. Further it is worthy of note that while outside the wall yellow earth is on almost the same level as its lowermost course, it has been found on the other side (wherever it was explored) to be of the same level as the height of the wall. All these facts taken into consideration leave no doubt as to the wall originally having served the purpose of a retaining wall of some platform. The platform in that case must have extended over a length of at least 160 feet on the north side at any rate. What this huge platform was intended for it is difficult, perhaps impossible, to determine. It deserves to be noticed in connection with this brick wall that it rests on yellow soil. But almost from its lowermost course commences the brick soil which continues right up to the top. It is by no means easy to decide whether this wall was originally built on yellow soil, or stood on black, its foundation courses alone being built upon the former. Whichever of these suppositions is accepted, this much is certain that the destruction of this brick wall was caused by some such agency as inundation, for, between the foundation slabs of the solid railing and the bottom of the wall the soil is purely of the alluvial kind, not a trace of any ancient remains such as pieces of bricks and pottery having been detected. This fact lends support rather to the supposition that the wall was constructed on yellow soil without any foundations. For, if this had not been so, fragments of pottery would have surely been detected between the top of the yellow soil and the foundations of the solid railing, as they are in all artificially raised levels of ground in the ruins of ancient sites. On careful inquiries with the old people inhabiting this place, I learnt that the soil here was still occasionally subject to floods. This is not at all incredible as one of the rivers of Bhilsā is not far from this site. One such inundation must have demolished the upper portion of the brick wall, buried the remainder under the silt brought in, and raised the height of the whole site to very nearly the original ground-level of the solid railing. The same agency also appears to be accountable for the destruction of this railing and the buckling forward of, at any rate, two of the retaining walls of the platform which it enclosed, to which reference has been made above.



PART III.

Conservation Comment.

Nothing of exceptional interest is to be recorded in the nature of conservation repair undertaken during the period under report and a general *resume* of such works will not include anything so out of the common as to warrant aught but the brief mention of its being.

Detailed measures of conservation undertaken and the expenditure incurred are set out in tabular form in Appendix L herewith, and the following notes are intended to amplify somewhat, in the few cases desirable, the necessarily abbreviated remarks noted therein against them.

Passing comment is also made upon visits to various archæological centres undertaken during the past cold weather season, and items, already included in the routine "Conservation Notes" issued by this Department, that have casual interest in themselves, are further noticed here.

A certain interest lends itself to the reparatory measures being undertaken to these caves, in that experiments are in progress with a view to discovering the immediate cause of the great amount of rain water that annually accumulates in the lower caves. Strange as it will seem, the channel of so much water accumulation is not definitely apparent, for while the fact of the cave fronts being quite open would normally account for the entrance of so much rain water, the counter fact of their facing north and hence away from the prevalent rain laden winds renders this natural assumption dubitable.

That trouble of this nature was experienced by the original excavators of the caves is indicated by the fact that, in one or two instances, the bottoms of the caves were actually lowered by further excavation to act as tanks for the storage of the water which even then accumulated in them.

However, though this periodic flooding of the lower parts of the caves may have occurred since their original excavation, its disintegrating action upon the parts thus subjected to alternating saturation and drying is very apparent through the crumbling surfaces, and to remedy this it is proposed to cut a small hole some 6" roughly in diameter through the rock from the face of the cliff beneath to slope gradually up to the floor of the caves affected, to ensure the immediate drainage of any water that may enter.

In an endeavour to divert one apparent channel of this water accumulation, the top of the sloping rock face above the cave No. 2, which cave exhibits definite evidence of free water percolation through some distended cleavage fissures in the roof and sides, is being cleared of its thin layer of covering earth and the fissures visible from above are being grouted with portland cement.

Upon the efficacy of the scheme of guttering ranged about the sloping rock face immediately above the caves, which was put in hand and completed before the time of my visit in the later rains of 1913, I, in common with the present Executive Engineer, am unable to comment, as the relative condition of the caves prior to its installation was known to neither of us. I am informed, however, by the Sub-Divisional Officer in charge of the work, that water accumulation has diminished considerably as an immediate outcome, and it is hoped that the measures now in hand will effectively combat the disintegrating action of the weather to which, in their present circumstances, the caves are susceptible.

Special repairs to the many temples grouped together in these villages are comprised chiefly by the building of compound walls
Aihole and Pattadakal. clearing of vegetation, levelling and the like, and these interesting monuments have gained tremendously in appearance through their more orderly setting.

Further measures of conservation were found upon my visit in January last to be very desirable in quite a number of instances, and these have been made the subject of "Conservation Notes" which are communicated in general routine to the officers concerned.

The only special repair being undertaken in the city of Bijapur is that to the Asar Mahal, where the dilapidating original roof covering is being replaced externally by a modern roof of concrete and steel. This new construction is hidden from general view by the surrounding original parapet walls about the roof, and by the jealous retention of all the old interior wood framing and panelling that is in a condition permitting of its being securely affixed, so that the original appearance of the old structure has not been disturbed in the least. Upon my visit last December little else in the nature of conservation repair was needed, although the old wood casing to the high columns of the open front was showing indications of decay through its long exposure directly to the weather, and in my Conservation Note I have recommended to the Public Works Department the experimental use of a certain wood preservative on the market in England, to see if further decay cannot be arrested.

While repairs here during the last year were limited to those minor measures of conservation that are known as "Current repairs" and no recent work of structural consequence has been undertaken to claim a reference in this restricted note, I think it should be mentioned that the condition of the water saturated plaster, spread in huge discoloured patches over the interior dome surface and pendentive, seems far from satisfactory, and I have recommended that this should be made the subject of close and careful investigation. Upon my visit its safety certainly appeared to be questionable, and should even a small portion of it become detached, its fall from such a great height may possibly be attended by serious injury to any persons present in the mosque.

Another matter which needs attention is what appears to be the reopening of an old crack extending through three stories in the south-east angle tower; but this, again, has been included among the departmental directions that are issued to the officers concerned.

To this great Tomb, and, again, to the *masjid* attached to the *Ibrahim Rauza*, the long chains, originally provided to facilitate access to the top of the domes externally, have, through the continued swinging of their lower loose ends in the wind, worn away the plastered brick core of the decorative *kanguras* out of which the dome appears to grow, and I have recommended that the chains be suitably lengthened with similar material to enable their ends to be anchored to the masonry projections that cover the angle stair exit at the flat spandrels of main roof.

In the course of my tour I made a point of inspecting every "Protected Monument" in the various districts visited, and those in Bijapur city alone, numbering some 73, include some very interesting monuments of considerable architectural merit, which, however, have been up to the present sadly neglected with regard to conservation attentions. A notably excellent monument which should be numbered among these, although up to the present the recommendation for its protection which was published in this Circle's Progress Report for the year 1908 (page 18) has not been given effect, is the cenotaph of Afzul Khan and its attached mosque, which are massed together in the one design and form an imposing composition. This excellent architectural monument was erected by Afzul Khan for the eventual reception of his remains long before his fatal expedition, in the year 1653, to reduce the fort of Pratapggarh then held in occupation by his destined murderer, Shivaji; but the bones of this warrior lie yet at the spot where he fell, upon a jungle-grown knoll immediately to the east of the fort.

Owing primarily, I suppose, to its distance, some 4 miles from Bijapur city, and to the absence of a *pukka* road over the two miles or so of country that intervenes between the passing high way and this monument, no attempt towards its conservation has yet been made, and dense cactus now abounds about it. Structurally, the monument is still in quite good condition, but is abandoned to the mercies of the local Bhils, who utilize it as a convenient *caravanserai* and build their fires in and about it. It should be notified as a protected monument under Class II, for it is eminently deserving of being rescued

from its present maltreatment. The necessary conservation recommendations to this end I have embodied in my "Conservation Notes", and it is to be hoped that funds for their execution will not be indefinitely withheld.

The monuments here are, generally, in a very satisfactory structural condition, and immediate attention in this respect is desirable in very few cases. Here again, however, an inspection of the many protected monuments—they are fifty in Ahmedabad city and suburbs alone—reveals the deplorable, if characteristic, fact that the most frequent source of artistic degradation with privately possessed monuments, protected or otherwise, is invariably associated with their respective owners or occupants.

As at Bijapur, the all-obliterating pall of whitewash is here to be seen covering in varyingly devastating degree almost every monument to its inevitable degradation as a work of artistic merit.

Delicately patterned arabesques, ruined beyond recognition, often buried wholly out of existence, by innumerable layers of limewhite are the general rule, and, if conservation endeavour is to result in anything pleasing or architecturally profitable, this ghastly disfiguration must be remedied, and in future prevented. Such limewhite coating has indeed, seldom even the cleanliness of its intention, and dirtied and draped, as it so frequently is, with dust-clung cobwebs, it nullifies any effort towards the artistic amenity of an archaeological monument that assuredly should be incident to its intelligent conservation. In my "Conservation Notes" I have asked for the submission of an estimate for the eventual complete removal of this limewhited pall in the many instances affected, and I would recommend that the rigorous steps for which the Act provides be in future taken against offenders in this respect.

In Ahmedabad, too, and equally obnoxious from both sanitary and æsthetic points of view, is the pernicious practice on the part of the owners of these wonderful mosques, which grace in such glorious profusion the crowding thoroughfares of this changeling city of mills and manufactures—of adding, in architectural prostitution, *kachcha*-built latrines, limewhited and evilly pungent, which are erected in many instances even immediately against the actual façades of the monument.

These shameful excrescences, augmented in their baneful disfiguration by the even more general *kachcha*-built shed covering an adjacent, and frequently original, ablution tank, whatever their ritualled significance, would effectively discount the decent pretensions of the meanest of buildings, and, seen in conjunction with these wonderful works of a long past architecture, the effect is appalling in the extreme. Roofed, too, as these *kachcha*-additions invariably are, with galvanized corrugated iron—is there any material more aptly symbolic of a commercial modernism, meanly cheap, and impenetrably indifferent to aught pertaining to art?—they figure as characteristic contributions to the art of a glorious past, and should serve for those who read as they run as vital commentary upon Indian art of the present.

Further, too, to be deplored is the prevalent notion of decorative amenity that in so many instances occasions the erection of straggling "Tea garden" trellis work about, and even against, a mosque; and here, again, must the protective provisions of an agreement under the Act be brought to bear, and every endeavour made to secure the concurrence of the owners to the removal of all such abortive additions that prostitute an architecture, in my own view, nigh incomparable.

Internally to these mosques, and to the many tombs here also, one's susceptibilities are excruciated by the conglomeration of tawdry glass baubles, lamps of municipal pattern, and even the "Brummagen" chandelier, shuddering with its pendent glasses, that is, strung from column to column, and hangs in hideous profusion from wires roughly attached to delicate dome pendants, which are invariably badly damaged in consequence.

This, again, is another calamity which it is earnestly hoped, is open to some remedy, for the present state of affairs is deplorable. I think some action

is very urgently to be desired, and I should be very glad to supply designs for the economical provision of pendent lamps that would, at least, be in character with the architecture. These I would propose to substitute, where a monument of merit suffers badly in this respect, for the present tawdry baubles, which could then be cleared wholly from sight, if not from its memory.

I think such action would be quite compatible with the more liberal view of the term "Conservation" which should aim essentially at the preservation of the monument as a structure, and as a work of architectural amenity, jealously to be preserved from the ill-conceived attentions of the artistically impermeable, to which, in these days, it is exposed.

Another source of hideous disfigurement, which calls for protest at every proffering opportunity in the hope of its eventual remedy, is the unreasoning habit on the part of Public Works Department subordinates of annually pointing any archaeological building that is allotted a grant under the heading of "Current Repair." In these two archaeological centres above mentioned, and, again, in Champanir which I also visited last season, this pointing scourge is distressingly virulent, and almost every archaeological building is affected in differing degree. Essential as this practice may, with some reason, be deemed in the upkeep of general utilitarian building, its application to ancient monuments which were constructed of finely wrought and closely jointed masonry *essentially without mortar* is, except in most exceptional circumstances, inevitably to be condemned. Instances innumerable does one find in which the old jointing, slightly weathered at the meeting of the joints, but yet as closely bedded as originally in exclusion of water entry, has been spread over for an inch or so in width with white *chunam* pointing, aggressively insistent through its hideous contrast with the time-mellowed tones of the old masonry.

In nearly every instance it is either quite unnecessary or unnecessarily hideous, and since the reason for it should be, primarily, to exclude water from the open joints of masonry, its use should be limited to those cases where the joints are sufficiently open to permit of its being *recessed* from the masonry face, and its omission, as obviously unnecessary, in those instances where this is not possible.

Trite as the foregoing observations may reasonably appear, the desirability for such insertion in this general note becomes increasingly obvious upon a detailed inspection of those many instances to which these remarks would apply.

Limited, too, as are the funds allotted for the execution of conservation repair, the application of even a small portion of them for use upon this frequently useless pointing, and again for its remedial removal, is scarcely to be desired, and it is hoped that the necessity for further comment upon this item will not be in future occasioned.

In February last I visited Dhar and its archaeological monuments to inspect the work carried out upon the recommendations of the Director General of Archaeology and of Mr. Bhandarkar, and found the work here, though not wholly completed—that at the Lat Masjid has yet to be undertaken—had been carried out in quite a satisfactory manner. I was able, however, to add somewhat to the conservation recommendations under reference in certain instances where this appeared to be desirable, but all were items of a minor nature.

Journeying on to Mandu in company with the State Engineer, I made a detailed inspection of the monuments to which conservation repairs had been undertaken, and found the work here very capably and intelligently carried out, and with an evident appreciation of the archaeological aspect of affairs. The few items of the present conservation programme remaining to be completed at the time of my visit have since been reported by the State Engineer to be, with certain exceptions, finished. (This report is published in Part I).

Here again, however, certain further works are necessary before these wonderful monuments can be considered structurally satisfactory, and these I have embodied in a "Conservation Note."

Chief among these monuments is the *Jami Masjid* and the condition of this mosque is such as will demand considerable attention in this respect. Owing primarily to the peculiar nature of the red stone of which it is built, spalled and shattered facing masonry is general over the whole structure, especially in those local patches subjected to concentrated pressure loads. One of the wall arches at the rear of the mosque, internally, which takes a very considerable amount of the central dome thrust shows signs of shattering badly, particularly upon the soffit, and I have recommended that, instead of the inner supporting arch used in these circumstances already in places in the side *dalans*, which here would necessarily decrease by its face width the present span of the old arch, and thus form a hiatus in the sequence of similar wall arcading, we should insert an angle-iron cranked to the curving intrados of the arch, and securely affixed at its springing, to receive the superincumbent load and support the shattering soffit of the old arch.

The shattering vault masonry under the *zenana* galleries is another serious item, and the best treatment of this is a problem, entailing considerable deliberation. Up to the present it would appear only to have been dealt within a contemplative capacity, and little beyond watching for further movement the various parts affected, has resulted.

Unfortunately, however, this watching has not been carried out in a systematic way, and I have recommended that for a short further period narrow glass strips be attached severally across each crack or disturbed portion of masonry and securely cemented in position. The least movement is apparent with this form of telltale which will settle more definitely whether active structural repair may with profit be undertaken.

In my view this latter will best be accomplished by the thorough and systematic use of injected cement grout under light pressure to permeate every crevice and so render homogeneous the whole structure.

In such a case as this, where the thin dressed-masonry facing, often disintegrating in itself and, seen through the gapped spaces whence it has fallen, quite separate and detached from the inner core of wall—and I could name innumerable similar cases in this Circle—the use of the apparatus known as a cement grouting machine and designed by Sir Francis Fox for application in similar circumstances in England, is the only possible treatment; and that, with the single alternative, prohibitively expensive, of wholly dismantling and rebuilding. Its principle lies in the steady and gentle injection under slight pressure of liquid portland cement to ensure that this binding medium thoroughly permeates every interstice, saturates the absorbent disintegrated particles, and so binds the whole into one solidly homogeneous mass. The necessity for something of this nature in the conservation repairs to Winchester Cathedral (I believe), where walls and detached piers were found to be built of unbonded stone work about a loose rubble core, led to its invention, and it is now common knowledge that this edifice and St. Paul's London, to quote two very notable instances, owe their continued existence in a very great measure to the use of this apparatus.

Here in India among our loosely built monuments, where a heavily weighted structural wall is, as a general principle, constructed of a thin outer facing, exquisitely wrought, a thin inner facing, with it essentially unbonded, and with loose rubble heaped between them without a suggestion of mortar or binding material, the value of the apparatus cannot be overestimated; at least, that is my view after already inspecting some three hundred monuments in varying stages of dilapidation, and in many cases it is the only manner of repair economically possible.

I am hoping to obtain Government consent to the purchase of one such machine for use in this circle and I should be very glad to personally superintend its operations in those many cases where its use is urgently to be desired.

While at Mandu, in compliance with instructions received from the Director General of Archaeology, I visited all the monumental remains that have as yet not received attention with regard to their conservation. These number some twenty additional monuments, and noteworthy among them are the Dai ka Mahal and Dai ki Chhoti Bahin ka Mahal, each quite a gem of architecture and in a remarkably good state of structural preservation, though decades of neglect and occasional despoilation have left their marks upon them.

Quite a deal of the original enamelled work yet remains to these buildings in the form of applied tiles, and a very effective treatment of banded black and white marble still remains in position almost intact.

The buildings are actually tombs though locally misnamed "*Mahals*," and though quite small are excellently designed, the former upon the simple *motif* of square tomb chamber broken with central opening at each façade, and surmounted with a single dome which, internally, crowns a pendentive octagon springing from the lower square. The latter of these buildings is an octagon upon plan but otherwise, except for minor differences in decorative treatment, is almost identical in general design. They are, both, at present all but inaccessible to the visitor, who has to struggle through dense jungle-grass shoulder high in his effort to approach them from the passing road. All the reparatory measures desirable to these monuments I have noted in my conservation recommendations that are issued to the officers concerned.

On the flat topped hill here, and close by the famous old tope, exist the

Sanchi, Bhopal.

scanty remains of an old Gupta temple, of which the upper portions of its monolithic shafts—some 20 feet in height—were projecting from the general debris and jungle that covered the site in the immediate vicinity of the tope before Dr. Marshall commenced his recent excavating operations here. In the general clearing of the site these columns were exposed for their full height, revealing the very dangerous angle of inclination into which, in different directions, they had fallen. Upon finally setting in order the site, as excavated, the Director General of Archaeology desired to restore these columns to their original verticality and, in compliance with his directions, I spent a fortnight at Sanchi erecting about them a grillage of temporary, but substantial, enclosing walls, from the top of which it is proposed to negotiate operations for the proper resetting of the displaced columns. The ugly inclination of these ponderous monoliths and their total lack of aught that might, with any signification, be termed foundations, compelled a very circumspect method of procedure in the turning of tentative shovelful of earth from about their threatening bases to form a level bedding for the enclosing walls, for nothing that could be utilized in temporary support was available; but happily I was able to leave them at my departure undisturbed and *in situ* with their buttressing walls growing steadily about them.

In the course of my touring I visited the ancient Buddhist caves at

Pitalkhora, Nizams Territory.

Pitalkhora, which is 18 miles from Chalisgaon, the nearest railway station, by way of a decidedly *kachcha* track which now and again loses itself altogether in the dense jungle through which it passes.

These caves are comprised by two principal excavations forming a *Chaitya* hall and a *Vihara*, and it was primarily to obtain reliable estampages of the inscriptions over the cells in the *Vihara*, upon instructions from the Director General of Archaeology, that was the object of my visit.

A point of considerable interest in the *Vihara* cave was in the existence of some structural masonry cells at the rear of the cave, erected to continue the sequence of adjoining rock-cut apartments where, it is to be assumed, the natural rock—here peculiarly friable—had failed and was even then badly disintegrated.

The structural notions displayed in the jointing of the component stones, and in the lack of sufficient bearing at lintel ends, would not point to any long established recognition of rudimentary structural requirements on the part of the original erectors. The lintels are now falling away through the promiscuous manner of their support and I have recommended the insertion of angle irons to carry them in the several instances necessary.

In the *Chaitya* cave there yet remains a great deal of the original painted plaster decoration—badly deteriorated through long exposure to weather, it is true, but sufficiently well preserved to indicate the colours and contours of the figures used in decoration—and a band of haloed Gandhara Buddhas are still traceable as a frieze upon the enclosing aisle wall. I obtained a representative series of photographs of these decorations and of the caves generally before coming away, and have since supplied Dr. Marshall with a conservation note for communication to the Hyderabad Durbar, recommending necessary measures of general conservation; chief among which is the removal of the enormous amount of rock *debris* that now lies fallen about both the caves, and the clearing of a reasonably accessible path to facilitate approach to them along the narrow valley of their setting, high between adjacent hill tops.

In closing this note I would further remark that it is, of necessity, not to be considered as an exhaustive record of conservation activity on the part of the Archæological Department during the period under general report, but rather as a brief commentary upon those works which may have a passing interest for the general observer; and that for full relevant particulars of the actual works undertaken, and in progress, and completed, a reference is invited to the information compiled under Appendix L.

Poona,
July 1914.

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